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Vol. VI

TRANSCRIPT OF RECORD

Supreme Court of the United States

OCTOBER TERM, 1930

No. 90

FRANK L. SMITH, CICERO J. LINDLY, HAL W. TROVILLION, ET AL., ETC., ET AL., APPELLANTS,

vs.

ILLINOIS BELL TELEPHONE COMPANY

APPEAL FROM THE DISTRICT COURT OF THE UNITED STATES FOR THE NORTHERN DISTRICT OF ILLINOIS

FILED APRIL 25, 1930

(34,976)

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VOL. VI

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IN THE

District Court of the United States

FOR THE NORTHERN DISTRICT OF ILLINOIS,

EASTERN DIVISION.

ILLINOIS BELL TELEPHONE COMPANY,
Plaintiff,

vs.

P. H. MOYNIHAN, HAL W. TROVILLION, WILLIAM J. SMITH, ALEX J. JOHNSON, J. PAUL KUHN, JAMES R. CLARK and DAN JACKSON, the Persons Constituting the Illinois Commerce Commission of the State of Illinois, and OSCAR E. CARLSTROM, Attorney-General of the State of Illinois,
Defendants,

and CITY OF CHICAGO, a Municipal Corporation,
Intervenor.

In Equity No. 3746

Exhibits of City of Chicago, Intervenor

City's Exhibit 2.

ILLINOIS BELL TELEPHONE COMPANY
CHICAGO EXCHANGE

OVERHEAD EXPENSE CHARGED TO CONSTRUCTION

AUGUST 1, 1911, TO JUNE 30, 1923

	Gross Additions Including Construction Work in Progress	Overhead Expense			Gross Wiring Gain	Total Overheads and Gross Wiring Gain	Gross Additions Excluding all Overheads and Gross Wiring Gain
		Engineering	General	Interest During Construction			
	A	B	C	D	E	B+C+D+E	A—F
1911—5 Mos.	$ 2,451,210	$ 43,111	.....	.....	$ 91,490		
1912	5,256,934	64,387	.....	.....	127,994		
1913	7,239,989	109,180	.....	.....	100,998		
1914	8,454,650	142,863	.....	.....	120,074		
1915	5,573,464	140,081	.....	.....	146,144		
1916	7,030,519	147,611	.....	.....	170,013		
1917	10,175,719	157,018	.....	.....	179,482		
1918	4,917,417	132,145	.....	.....	204,930		
1919	5,547,726	131,628	.....	.....	283,804		
Total	$56,647,628	$1,068,024	.....	.....	$1,424,929	$2,492,953	$54,154,675
1920	7,624,118	341,459	25,659	27,886	171,616		
1921	11,781,810	430,745	58,887	104,447	249,526		
1922	11,706,441	436,421	59,565	343,394	281,647		
1923—6 Mos.	6,101,860	246,742	34,788	148,202	162,436		
Total	$37,214,229	$1,455,367	$178,899	$623,929	$865,225	$3,123,420	$34,090,809
Grand Total	$93,861,857	$2,523,391	$178,899	$623,929	$2,290,154	$5,616,373	$88,245,484

No insurance or taxes have been charged to construction.

City's Exhibit 3.

SUMMARY

COST OF REPRODUCING BUSINESS

of the

ILLINOIS BELL TELEPHONE COMPANY

CHICAGO EXCHANGE

Training Operators	8,325 at $260.	$ 2,164,400
Training Maintenance Force	1,255 at $340.	426,700
Training Commercial and other forces	707 at $260.	183,820
Development of Methods and Forms	1,750 at $100.	175,000
Publicity and Subscriber Service	605,495 at $4.	2,421,980
Initial Cost of Directory	605,495 at $.60	363,297
Fixed Charge on Plant in Excess of Normal		12,670,093
		18,405,290

CITY'S EXHIBIT 4.

ILLINOIS BELL TELEPHONE COMPANY
CHICAGO EXCHANGE

PLANT AND EQUIPMENT

	January 1, 1923	June 30, 1923	December 31, 1923
Exchange Right of Way (207-01)	$ 236,717.97	$ 241,113.30	$ 260,042.54
Toll Right of Way (207-02)	1,662.29	1,661.60	1,661.60
Total Right of Way	238,380.26	242,774.90	261,704.14
Land (211)	1,349,640.54	1,680,503.59	1,685,670.87
Buildings (212)	9,112,167.31	9,228,672.01	9,423,101.37
Total Land and Bldgs.	10,461,807.85	10,909,175.60	11,108,772.24
C. O. Telephone Equipment (221)	19,544,013.71	26,245,808.65	27,465,377.08
Other Equipment of C. O. (222)	821,991.51	873,376.23	892,698.00
Total C. O. Equipment	20,376,005.22	27,119,184.88	28,358,075.08
Station Apparatus (231)	7,825,805.42	8,322,949.06	8,903,599.89
Station Installation (232)	5,496,832.75	5,843,926.85	6,190,460.61
Interior Block Wires (233)	25,049.50	25,082.82	25,074.90
Private Branch Exchanges (234)	4,484,459.37	4,781,519.09	5,078,553.08
Booths and Special Fittings (235)	250,295.50	270,956.99	265,672.79
Total Station Equipment	18,082,442.54	19,244,434.81	20,463,361.27
Exchange Pole Lines (241)	1,973,773.86	2,067,707.92	2,223,098.72
" Aerial Cable (242)	2,880,429.05	3,014,793.66	3,115,603.45
" " Wire (243)	1,896,295.22	2,006,640.74	2,224,744.80
" Underground Conduit (244)	8,993,722.32	9,189,482.99	9,693,083.28
" " Cable (245)	16,679,618.39	17,473,403.80	18,494,053.27
" Submarine " (246)	866.30	1,010.80	1,011.12
Total Exchange Lines	32,424,705.14	33,753,039.91	35,751,594.64
Toll Pole Lines (251)	147,981.67	148,812.72	87,225.51
" Aerial Cable (252)	17,921.85	17,920.29	7,659.27
" " Wire (253)	199,505.43	200,110.88	125,283.48
" Underground Conduit (254)	596,308.25	596,308.25	507,639.12
" " Cable (255)	1,367,537.41	1,370,902.22	1,302,415.84
" Submarine " (256)	.....	.....	.....
Total Toll Lines	2,329,254.61	2,334,054.36	2,030,223.22
Interest During Construction (268)	486,690.40	634,892.63	644,082.79
Undistributed Construction Expenditures (270)	1,049.75	1,082.00	17,858.97
Total Plant in Service	84,400,335.77	94,238,639.09	98,635,672.35
Office Furniture and Fixtures (261)	652,523.28	687,419.07	757,955.52
General Store Equipment (263)	18,079.98	19,438.46	20,236.03
" Stable and Garage Equipment (264)	387,254.58	438,603.96	459,239.87
" Tools and Implements (265)	229,622.25	241,913.37	272,315.08
Total General Equipment	1,287,480.09	1,387,374.86	1,509,746.50
Total Plant and Equipment in Service	85,687,815.86	95,626,013.95	100,145,418.85
Construction Work in Progress (104)	6,019,435.11	194,376.44	812,542.81
Total Physical Property	$91,707,250.97	$95,820,390.39	$100,957,961.66

City's Exhibit 5.

ILLINOIS BELL TELEPHONE COMPANY

CHICAGO EXCHANGE

TELEPHONE OPERATING REVENUES—YEAR 1923

EXCHANGE SERVICE REVENUES	
Subscribers' Station Revenues (500)	$32,927,998.11
Public Pay Station Revenues (501)	3,143,498.30
Service Stations (503)	.....
Private Exchange Lines (504)	111,544.41
Minor Rents of Exchange Plant (505)	159,184.93
Other Exchange Revenues (506)	.....
Total Exchange Service Revenues	$36,342,225.75
TOLL SERVICE REVENUES	
Message Tolls (510)	2,711,953.78
Leased Toll Lines (512)	188,711.74
Telegraph Tolls (513)	.....
Telegraph Service on Toll Lines (514)	142,328.38
Minor Rents of Toll Plant (515)	.....
Other Toll Revenues (516)	.....
Total Toll Service Revenues	$ 3,042,993.90
MISC. OPERATING REVENUES	
Messenger Service (520)	1,839.45
Telegraph Commissions (521)	36,702.83
Other Telegraph Service Charges (522)	.....
Advertising and Directory (523)	382,965.54
Rents from Other Oper'g. Property (524)	177,543.14
Other Miscellaneous Revenues (525)	73,997.80
Licensee Revenue—Cr. (526)	.....
Total Misc'l. Oper'g. Rev's. (except Licensee Rev.—Dr.)	673,048.76
Tel. Operating Rev's. (except Licensee Rev.—Dr.)	40,058,268.41
Less Licensee Revenue—Dr. (527)	1,724,250.54
Total Telephone Operating Revenues	$38,334,017.87

CITY'S EXHIBIT 6.

ILLINOIS BELL TELEPHONE COMPANY

CHICAGO EXCHANGE

TELEPHONE OPERATING EXPENSES—YEAR 1923

Supervision of Maintenance (601)	$ 434,605.12
Repairs of Aerial Plant (602)	510,445.79
Repairs of U. G. Plant (603)	391,014.22
Repairs of C. O. Equipment (604)	1,777,293.83
Repairs of Station Equipment (605)	1,383,538.31
Repairs of Buildings & Grounds (606)	155,185.66
Other Maintenance Expenses (610)	1,605.20
Total Ordinary Repairs	4,653,688.13
Station Removals & Changes (607)	1,248,045.15
Total Current Maintenance	5,901,733.28
Depreciation of Plant & Equipment (608)	4,480,953.78
Extraordinary Depreciation (609)	.....
Total Maintenance	10,382,687.06
Traffic Superintendence (621)	549,776.31
Service Inspection (622)	104,254.50
Operating Clerical Wages (623)	225,921.94
Operators' Wages (624)	9,778,186.49
Rest & Lunch Rooms (626)	864,948.74
Operators' Schooling (627)	527,357.72
C. O. Stationery & Printing (629)	58,969.43
Messenger Service (630)	1,212.72
Pay Station Expenses (632)	165,142.51
Other Traffic Expenses (633)	232,943.26
Total	12,508,713.62
Transmission Power (628)	134,089.58
Miscellaneous C. O. Expenses (631)	549,869.47
Leased Line Operating Expenses (635)	.....
Total Traffic	13,192,672.67

City's Exhibit 6—(Continued)

Commercial Administration (640)	753,803.49
Advertising (642)	97,295.09
Canvassing (643)	55,272.73
Sub-licensee Relations (644)	.....
Revenue Collecting (647)	872,540.44
Directory Expenses (649)	765,000.00
Other Commercial Expenses (650)	311.79
Total	2,544,223.54
Revenue Accounting (646)	663,958.71
Pay Station Commissions (648)	994,090.37
Total Commercial	4,202,272.62
General Office Salaries (660)	268,678.30
General Office Supplies & Expenses (663)	65,463.62
General Law Expenses (667)	53,300.62
Insurance (668)	† 4,577.56
Accidents and Damages (669)	43,313.48
Expenses Connected with Damages (670)	6,356.82
Relief Department & Pensions (672)	539,035.42
Telephone Franchise Requirements (673)	216,321.01
Amortization of Franchise & Patents (674)	.....
Other General Expenses (675)	141,039.91
Less Telephone Franchise Requirements—Cr. (676)	197,392.11
Less Charged Construction—Cr. (690)	68,345.14
Total General & Miscellaneous	1,063,194.37
Total Telephone Operating Expenses	$28,840,826.72

†Red.

CITY'S EXHIBIT 7.

ILLINOIS BELL TELEPHONE COMPANY
CHICAGO EXCHANGE

INCOME STATEMENT—YEAR 1923

Telephone Operating Revenues (300)	$38,334,017.87
Telephone Operating Expenses (301)	28,840,826.72
Total Net Operating Revenues	9,493,191.15
Uncollectible Operating Revenues (304)	177,594.93
Taxes Assignable to Operations (305)	3,674,933.17
Total Deductions from Operating Revenues	3,852,528.10
Total Operating Income	5,640,663.05
Miscellaneous Rent Revenues (311)	9,861.00
Interest Earned (313-01)*	470,887.68
Interest Charged Construction (313-02)	162,708.21
Sinking and Other Reserve Fund Accretions (314)*	245.38
Misc. Non-Operating Revenues (316)	117,263.68
Total Non-Operating Revenues	760,965.95
Rent Expense (320)	14,816.18
Non-Operating Taxes (322)	† 4,586.00
Uncollectible Non-Operating Revenues (323)	† 19.25
Total Non-Operating Revenue Deductions	10,210.93
Net Non-Operating Revenues	750,755.02
Total Gross Income	6,391,418.07
Rent Deductions for Telephone Offices (331)	77,348.79
Rent Deductions for C. P. & Other Supports (332)	6,725.84
Miscellaneous Rent Deductions (334)	60.00
Total Rent Deductions	84,134.63
Amortization of Landed Capital (340)	12,565.36
Misc. Deductions from Income (341)*	14,887.62
Total Miscellaneous Deductions	27,452.98
Total Deductions from Gross Income	111,587.61
Balance Net Income	$ 6,279,830.46

*Prorated on basis of average plant in service.
†Red.

City's Exhibit 13.

ILLINOIS BELL TELEPHONE COMPANY
CHICAGO EXCHANGE

		1921		1922		1923
Operation Expenses		$17,513,601		$18,530,824		$20,089,645
Current Maintenance		4,827,958		5,089,705		5,901,734
Total		22,341,559		23,620,529		25,991,379
Average 6 weeks		2,577,872		2,725,446		2,999,005
ENTIRE COMPANY						
Due from Subs. and Agents		4,336,380		4,536,956		5,008,689
Chicago	67.5%	2,925,000	68%	3,085,000	69%	3,455,000

WORKING ASSETS AND LIABILITIES—ENTIRE COMPANY

	1921		1922		1923	
	June 30	Dec. 31	June 30	Dec. 31	June 30	Dec. 31
Cash	$ 289,751	$ 908,565	$ 761,210	$1,509,975	$1,993,431	$1,814,206
Employees' Working Funds	123,150	113,621	152,947	127,318	156,413	143,104
Marketable Securities	1,334	1,334	1,432	4,356	4,449	4,229
Bills Receivable	14,410	16,393	73,254	32,312	36,093	52,847
A/c Receivable—Subscribers	3,840,310	4,344,579	4,305,364	4,545,338	4,479,046	5,016,823
—System	385,894	389,347	301,591	403,472	398,358	295,752
—Miscellaneous	92,246	106,285	146,447	80,655	127,701	147,708
Total	4,318,450	4,840,211	4,753,402	5,029,465	5,005,107	5,460,284
Matured Interest Receivable	209	..	29	875	9	..
Working Assets	4,747,304	5,880,124	5,742,274	6,704,301	7,195,502	7,474,670
A/c Payable—Vouchers & Wages	1,252,614	2,448,030	880,015	1,074,488	1,161,439	1,327,489
—Subs. Deposits	34,350	26,647	36,639	39,298	62,905	67,101
—System	1,690,541	2,260,024	2,859,116	1,520,340	2,200,096	2,111,529
—Miscellaneous	109,283	108,916	117,421	111,705	112,920	118,834
Matured Interest Payable	253	253	253	80	68	68
Service Billed in Advance	18,260	8,199	19,084	8,382	23,707	8,134
Other Current Liabilities	13,221	8,900	8,067	....	29,787	21,905
Working Liabilities	3,118,522	4,860,969	3,920,595	2,754,293	3,590,922	3,655,060
Net	1,628,782	1,019,155	1,821,679	3,950,008	3,604,580	3,819,610
Chicago 68%	1,110,000	687,500	1,240,000	2,685,000	2,490,000	2,635,000
		67½%	68%	68%	69%	69%

CITY'S EXHIBIT 15.

CHICAGO TELEPHONE COMPANY,
Office of the President

Chicago, September 19, 1913.

N. C. Kingsbury, Esq., Vice-President,
American Telephone and Telegraph Company,
15 Dey Street, New York.

Dear Sir:

Referring to the proposed readjustment of the relations between your Company and the Chicago Telephone Company in connection with the long distance telephone business handled in Chicago, for the purpose of simplifying the operating and accounting routines, and for the purpose also of meeting the question recently raised by the city as to the right of the A. T. & T. Company to operate in the City of Chicago, we submit the following proposition:

The Chicago Company for a long period has been receiving as its proportion of the revenue of the long distance traffic in Chicago a specific rate per message, and in addition compensation for plant, lunches, lockers, toilet facilities and supplies to your employees; battery current and the maintenance of batteries; electric light; and space in its buildings, which items, summarized for a six months' period, March to August, 1913, inclusive, are as follows:

335,597 messages at 17¢ each	$57,051.49
For use of plant	46,775.89
Lunches, Lockers, and toilet supplies....	4,209.15
Battery current and maintenance of batteries	1,295.47
Electric light and rent for space occupied	8,487.77
Miscellaneous items	189.71
Total	$118,009.48
Average per month	$ 19,668.25

We have recently purchased from you the Long distance switchboards located in the toll building on Franklin street, near Washington, and the Morrell Park Test and Operating Station, and the contents thereof, at a price to be determined by appraisal.

We will take over into our employment, as of September 1st, 1913, all of the employees now in the service of the A. T.

& T. Company necessary to conduct the long distance traffic in Chicago, and the amount of their compensation shall be charged for in addition to the amount referred to above, plus ten per cent. (10%).

Whatever other items of expense the Chicago Company is put to, to carry out this plan, shall also be added to the above, with ten per cent. (10%)

When the value of the switchboards in the toll building and the Morrell Park Station has been ascertained and paid, the Chicago Company shall be entitled to an amount which will represent a reasonable return on the investment and the cost of maintaining the property; and it shall also be entitled to a proper return on the investment and cost of maintenance of any additional switchboard or facilities supplied on account of the long distance traffic.

The long distance traffic shall be conducted in accordance with standard rules.

This arrangement shall be effective as of September 1st, 1913.

Yours very truly,
CHICAGO TELEPHONE COMPANY,
By B. E. SUNNY,
President.

Accepted:
AMERICAN TELEPHONE AND TELEGRAPH COMPANY,
By N. C. KINGSBURY,
Vice-President.

CITY'S EXHIBIT 16.

March 10, 1911.

American Telephone and Telegraph Company,
Mr. H. B. Thayer, Vice President,
15 Dey Street, New York.

Dear Sir:

We will accept your proposition dated February 14, 1911, that in place of special rental for trunk lines and terminal facilities in the City of Chicago these lines will hereafter be used jointly by our Company with yours and that you will pay us five cents (5¢) for each outgoing paid A. T. and T. call from Chicago for the services rendered; such payments to begin January 1, 1911, and continue until further agreement between us.

Yours very truly,
B. E. SUNNY,
President.

CITY'S EXHIBIT 17.

AMERICAN TELEPHONE AND TELEGRAPH CO.

15 Dey Street,

New York, February 14 1911

H. B. Thayer,
Vice-President.

Chicago Telephone Company,
203 Washington Street,
Chicago, Illinois.

Gentlemen:

You have in the City of Chicago been furnishing to us for our exclusive use in connection with long distance messages, certain trunk lines extending from your operating switch board to various branch offices of your Company located in different parts of the City. These have been associated with special B boards and B board operating appliances. The cost of these trunk lines has been covered by annual rental.

It is now proposed that these facilities shall continue to be furnished by you as they may be required from time to time by us for our long distance business and that for the greater economy of both Companies they may be used in common for the toll business of your Company as well as our long distance messages. For that privilege we have now to propose that instead of being covered by annual rental for certain specific trunk lines, etc., the cost to be figured upon a message basis. Your costs during 1910 have been shown to be about five (5) cents for each outgoing long distance paid call covering annual charges on these trunk lines.

We have now to propose that this amount of five (5) cents for each outgoing call be the basis upon which this Company will pay you for these special facilities, such payments to be in force from January 1st, 1911, and continue under further agreement between us.

Yours very truly

(Signed) H. B. THAYER,
Vice-President.

City's Exhibit 18.

ILLINOIS BELL TELEPHONE COMPANY

ANNUAL CHARGE PERCENTAGES APPLICABLE TO LONG LINES PLANT IN CHICAGO

	Interest*	Taxes	Insurance	Administration	Depreciation	Maintenance	Total
REAL ESTATE AND INSIDE PLANT							
(September 1, 1913 to December 31, 1919)							
Land	10%	1.5%	..%	2%	..%	..%	13.5%
Buildings	10	1.5	.3	2	4	5	22.8
Central Office Equipment	10	1.5	.5	2	10	8.5	32.5
Furniture and Fixtures	10	1.5	.5	2	10	8.5	32.5
Station Equipment	10	1.5	..	2	20	20.5	54.0
OUTSIDE PLANT							
(January 1, 1911 to December 31, 1914)							
Poles	10	1.5	..	2	16.7	12	42.2
Cross Arms	10	1.5	..	2	10	12	35.5
Open Copper Wire	10	1.5	..	1	4.2	6	22.7
Aerial Cable (Purchased)	10	1.5	..	1	9	6	27.5
" " (Constructed)	10	1.5	..	1	5.8	3	21.3
Underground Conduit	10	1.5	..	1	2	1	15.5
Main Underground Cable	10	1.5	..	1	3	2	17.5
Cable Loading Coils	10	1.5	..	1	5	2	19.5
OUTSIDE PLANT							
(January 1, 1915 to December 31, 1919)							
Pole Lines	10	1.5	..	1	8.3	2	22.8
Aerial Wire	10	1.5	..	1	2.5	4	19
Aerial Cable	10	1.5	..	1	5.8	5.5	23.8
Underground Conduit	10	1.5	..	1	2	1.1	15.6
Underground Cable	10	1.5	..	1	2.8	1.9	17.2
Right of Way	10	1.5	..	1	6.3	..	18.8

*Including Franchise Tax—City of Chicago.

City's Exhibit 19.

ILLINOIS BELL TELEPHONE COMPANY

PRESENT ANNUAL CHARGE PERCENTAGES APPLICABLE TO LONG LINES PLANT IN CHICAGO

EFFECTIVE JANUARY 1, 1920

	Interest*	Taxes	Insurance	Administration	Depreciation	Maintenance Actual Cost Plus 10% Except for Classes as indicated	Total
REAL ESTATE & INSIDE PLANT:							
Land	10%	1.5%	..	2%	..	..	13.5%
Buildings	10	1.5	.3	2	4	..	17.8
Central Office Equipment	10	1.5	.5	2	10	..	24
Furniture & Fixtures	10	1.5	.5	2	10	..	24
Station Equipment	10	1.5	..	2	20	..	33.5
OUTSIDE PLANT:							
Pole Lines	10	1.5	..	1	8.3	2	22.8
Aerial Wire	10	1.5	..	1	2.5	..	15
Aerial Cable	10	1.5	..	1	5.8	..	18.3
Underground Conduit	10	1.5	..	1	2	1.1	15.6
Underground Cable	10	1.5	..	1	2.8	1.9	17.2
Right of Way	10	1.5	..	1	6.3	..	18.8

*Including Franchise Tax—City of Chicago.

City's Exhibit 20.

ILLINOIS BELL TELEPHONE COMPANY

CHICAGO EXCHANGE

COMPARISON OF COMPOSITE DEPRECIATION RATES FOR THE ENTIRE EXCHANGE AREA AND FOR EACH CLASS OF PLANT WITH THE DEPRECIATION FACTOR INCLUDED IN THE ANNUAL CHARGE BILLING RATES APPLIED, FOR BILLING PURPOSES, TO THE PLANT IN THE CITY OF CHICAGO RESERVED FOR LONG LINES PURPOSES DURING THE YEAR 1923.

	Composite Rates for Entire Chicago Exchange Area	Rates Applicable to Plant Reserved for Long Lines Purposes
Right of Way—Exchange	2.5%	..%
" " " —Toll	5.0	6.3
Buildings	2.5	4.0
C. O. Equipment	8.0	10.0
Station Apparatus	7.0	) 20.0
Station Installations	..	)
Interior Block Wires	..	
Private Branch Exchanges	8.0	
Booths and Special Fittings	8.0	
Exchange Pole Lines	7.7	
Toll " "	6.3	8.3
Exchange Aerial Cable	5.0	
Toll " "	3.6	5.8
Exchange Aerial Wire	5.2	
Toll " "	3.9	2.5
Exchange Underground Conduit	2.4	
Toll " "	2.0	2.0
Exchange " Cable	2.7	
Toll " "	2.5	2.8
Exchange Submarine "	10.0	
Toll " "	10.0	
Office Furniture and Fixtures	8.0	

CITY'S EXHIBIT 22.

STATE OF ILLINOIS.

FILED JULY 18, 1923.

Chicago Office.

ILLINOIS COMMERCE COMMISSION.

CONTRACT OF NOVEMBER 10, A. D. 1879.

THIS AGREEMENT, made this tenth day of November, 1879, by and between the WESTERN UNION TELEGRAPH COMPANY, for itself and for the GOLD AND STOCK TELEGRAPH COMPANY, AMERICAN SPEAKING TELEPHONE COMPANY, and HARMONIC TELEGRAPH COMPANY, which it represents, Party of the First Part, and the NATIONAL BELL TELEPHONE COMPANY, Party of the Second Part Witnesseth:

ARTICLE 1. (1) The party of the second part shall pay to the party of the first part, upon all telephones used in the United States, under any license from the party of the second part, express or implied, unless expressly excepted, a royalty or bonus of twenty per cent of all rentals or royalties actually received or rated as paid in accordance with the provisions of this contract, from licenses or leases for speaking telephones, (exclusive of call bells, batteries, wires and other appliances, or services furnished or performed). The rentals or royalties upon which said royalty or bonus to be paid to the party of the first part is to be reckoned shall, for that purpose, be ascertained by deducting from the gross rental or royalty received or rated as hereinafter declared, the commissions and allowances herein provided for.

(2) The royalty or bonus to be paid on telephones made in the United States solely for export and not licensed for use in the United States, shall be twenty per cent of the net profit actually derived by the party of the second part in their manufacture and sale above the cost of such manufacture, not including any part of the general expense of the party of the second part as part of such cost, and not including in the manufacturer's profit any enhancement of price fairly due to the fact that the party of the second part holds or in any way controls a monopoly of the use of such telephones in any foreign country other than Canada, if such case shall exist.

Provided, however, that where the party of the second part shall be in any way interested in the purchase or use of such

telephones in such foreign country, it shall be at the option of the party of the first part to require an accounting for all telephones so exported as if sold at a fixed profit of thirty-three and one-third per cent upon the cost of manufacture.

(3) Allowance shall be made for rentals or royalties which cannot be collected, and for usual and reasonable deadhead of free privileges.

ARTICLE 2. Concerning the sum which is to be taken as the gross rental or royalty for the purposes of the preceding article, it is declared and agreed:

(1) The word "telephone," as used in this contract, refers to an instrument for electrically transmitting or receiving articulate speech, and is understood to mean either a transmitting instrument, incapable of use as a receiver, a receiving instrument incapable of use as a transmitter, or an instrument capable of being used both as a transmitter and receiver.

(2) Ten dollars per annum for each telephone where only one is used at a terminal or station, and fifteen dollars per annum for a pair of telephones composed of an instrument used for sending and another instrument used for receiving, used at one terminal or station, are recognized as the present standard rates of gross rentals or royalties; and the party of the second part may change them, subject to the qualifications of sections (4) and (5) of this article, but not otherwise.

(3) Telephones used on exchanges or lines owned in whole or part by the party of the second part, or by auxiliary corporations or organizations in which it is interested, or rented together with lines owned in whole or part by it, or by auxiliary corporations or organizations in which it is interested, shall be rated as paying to said second party the said recognized standard rates, or such other rates as may hereafter be established in accordance with this contract for like uses by parties other than the second party or auxiliary corporations or organizations in which it is interested, less the commissions and allowances provided for by this contract; but whenever the party of the second part is or shall be interested with others in the ownership of such exchanges or lines, the annual rental or royalty actually charged to and received from the owners thereof for the use of the telephones, if greater than the rates established as aforesaid, shall be taken to be the gross rental for the purpose of ascertaining the stipulated bonus or royalty.

(4) No reduction from the said present recognized stand-

ard rates which shall be made on telephones used on exchanges or lines owned in whole or in part by the party of the second part or by auxiliary corporations or organizations in which it is interested, or rented together with lines owned in whole or in part by it, or by auxiliary corporations or organizations in which it is interested, shall operate to reduce said royalty or bonus to be paid to the party of the first part below $1.00 per annum for each terminal single telephone, and $1.80 per annum for each terminal pair, unless such reduction be made with the consent of the first party, or as provided in the following section.

(5) Whereas it is difficult to determine absolutely and in advance the price which at all times and for all purposes it will be advantageous for the interests of the patents and of both the parties as interested in income derived from royalties and rentals, to charge, either with a view of increasing the revenue of the parties hereto from royalties and rentals, by enlarging the demand for the instruments, or under circumstances of competition, it is agreed that the party of the second part, in cases where its power to reduce is qualified as hereinbefore expressed, may reduce the rentals either generally or for a particular purpose, or a particular locality, or a particular licensee or class of licensees, to such sum as may be advantageous as aforesaid for the interests of both parties and as may be determined by agreement of the parties hereto, or as provided in this article.

If the parties do not agree as to the propriety of such a reduction, or as to the amount, extent or manner thereof, then said second party may in writing notify the first party of its desire for a reduction, and shall specify in such notice the reduction it desires and the character thereof, and the reasons therefor, and request the other party to join with it in selecting and appointing three referees. If the parties hereto shall not jointly appoint three referees within seven days from the receipt of such notice, then the moving party may, within seven days after the expiration of said first period, name one referee and notify such appointment to the other party, and request it to appoint another referee within seven days after receipt of notice of such appointment. If said other party shall not appoint a second referee within said period, then the moving party may give to the party in default written notice of the former application and notices, and that the time therein specified has expired, and that the moving party has not received information of the appointment of a referee by the other in accordance therewith, and

inclosing copies of said former notices, and the party of the first part within one week after receipt of the last described communication may in writing appoint a referee and notify such appointment to the other party, and thereupon the reference shall be proceeded with as herein provided; and the change specified in the notice first given as above shall be deemed agreed to, and shall *ipso facto* take effect and be established upon the expiration of the period last above referred to, unless the other party shall appoint a referee as aforesaid within said period. Said two referees shall jointly select and in writing appoint a third within ten days after the appointment of the second of said two. If said two do not select and appoint a third within the period above specified, then the moving party may apply to any judge of the United States Circuit or District Court in the Cities of Boston, or New York, or Brooklyn, and request him to appoint said board of three referees. Said judge shall not be required to and shall not consider whether any occasion or right to such reduction exists, and he shall act summarily in appointing said three referees, having first given the parties reasonable opportunity to be heard, on such notice as he shall think fit. If any judge applied to shall decline to act, then the moving party may apply to some other of the persons above designated. All the three referees, however appointed, shall be *disinterested, and not officers nor in the employ of any of the parties named in this contract. An award in writing, made and signed by any two of them shall stand as the award of the board. Unless the decision is made and notified to the parties within thirty days from the appointment of the three referees, the moving party may, at its option, treat the reference as void and inoperative, and a new appointment may be called for in the manner and with the effect herein specified. Said referees shall have power to determine whether occasion for a reduction exisits for the reasons stated in the preamble of this section, and if so, then to determine how far, to what extent, and for how long the said limitation on the power of the second party to reduce the rentals shall be removed or modified. After such removal or modification the said limitation, as modified, unless and until further changed, as herein provided, shall stand and be in all respects in lieu of that hereinbefore declared. During six months after a decision so made, no new reference upon the some subject before submitted can be asked for; but during that period either party may apply to the same board of referees, and said board, if it shall find that a new state of*

facts, or new exigencies have arisen and require some change, may make such change in their award as they find occasion for as aforesaid, and such change shall stand and be operative from the time it is made and notified to the parties until further change be made by said board within said period, or by a new reference called for after said period, or by agreement of said parties. If during said period any arbitrator dies, refuses, or for any reason is unable to act, then the vacancy shall be filled by said parties jointly, if they agree, and failing to agree, then by the two remaining referees, and if they do not so appoint within ten days after a request in writing from either party so to do, then the vacancy may be filled by some judge, as hereinbefore provided.

Twenty per cent of the expenses and compensation of the referees shall be paid by the party of the first party, and eighty per cent by the party of the second part, unless the referees shall otherwise order. The notices herein required to be given may be given to the President or Secretary of the Western Union Telegraph Company or persons acting as such, and to the President, Secretary or Treasurer of the National Bell Telephone Company or of its successors, or persons acting as such officers.

It is, however, expressly agreed and further provided that the party of the first part, at any time after the receipt of actual notice of an actual reduction of rates in consequence of its default, as aforesaid, may in the manner above provided, on alleging and showing to party of the second part, and upon their failure to join in a reference, as aforesaid, then upon showing to any of the judges above referred to, that it did not receive and was not informed of the notices to appoint and the communication of such notice above described, require and obtain, in the manner above provided, the appointment of a reference to consider any reduction thus fixed by default, and the referees thus appointed may by award, in whole or in part, restore the former limitation on the power to reduce rates, which restoration shall take effect from the date of said award.

If, from any cause, a reference twice called for shall fail to produce a valid determination, as herein contemplated, upon the matter submitted, or to be submitted, then the party aggrieved may have such relief or protection in a court of law or equity in the premises by a specific performance or otherwise, as such court can afford.

(6) Telephones for speaking-tube purposes, that is, instruments to be used for speaking from one part of the li-

censee's premises or from one of his buildings to another, analogous to the use of speaking tubes, or telephones to be used by institutions of learning for scientific purposes, or telephones for connecting persons and families for social or household purposes only, not connecting with any exchange or central office, and telephones which are not to be used in circuit with any exchange or central office, and are not rented together with lines owned by the party of the second part directly or indirectly or by any auxiliary organizations in which it is interested, may be put out either at lower rentals than the standard, or at a gross sum to be paid in one payment, according to the discretion of the party of the second part; and in respect of such telephones the royalty or bonus is to be twenty per cent of the reduced rental or gross sum less commissions actually paid as herein provided.

(7) The party of the second part may increase the established annual rate either generally or upon telephones used for any particular purpose, or by any particular class of licensees, from time to time, at its discretion, and such higher rates, while in force, shall be taken to be the gross rentals or royalties in respect of the telephones for which they are obtained.

(8) The limitations on reductions herein contained shall not apply after the expiration of the patent of the United States No. 186,787, granted to Alexander Graham Bell, Jan. 30, 1877, which patent will expire Jan. 30, 1894, unless some other patents owned by the said party of the second part, or under which it has exclusive licenses, shall operate to control the use of all speaking telephones substantially as they are now controlled by the patents represented by the two parties hereto.

ARTICLE 3. (1) In ascertaining rentals on which the royalty or bonus is to be paid to the party of the first part, there shall be deducted from the gross rentals the following commissions and allowances:

On telephones used in districts or exchange systems owned in whole or in part by the second party, or by auxiliary corporations or organizations in which it is interested, an allowance or commission of thirty per cent.

On telephones taken by the first party for private lines as hereinafter provided, or used by the second party on its own lines or put out by it, by its own officers or servants for any use other than on district or exchange systems in which it is interested as aforesaid, twenty-five per cent; and the party of the first part or those it represents shall be allowed

said abatement of twenty-five per cent from the standard rentals upon telephones leased to it or them, except where contracts heretofore entered into by said party of the second part oblige it to pay such rate, or a higher rate of commissions to its present licensees.

Upon all telephones other than the foregoing, such rate of commission as shall actually be paid, not to exceed forty per cent, except so far as existing contracts may call for higher rates.

ARTICLE 4. (1) The party of the first part shall bear and pay twenty per cent, and the party of the second part eighty per cent., of all reasonable legal expenses incurred in ascertaining, investigating and determining, and in prosecuting and defending rights which the party of the second party may have, claim, or wish to acquire, pertaining to telephones or the right to use telephones, or to inventions used in telephones, and concerning patent rights which it or others may claim respecting the same, including expenses in suits and in proceedings in the Patent Office relating to such rights or to the collection of rentals or royalties on telephones. Expense incurred in whole or in part in respect to inventions or improvements which are or may be used otherwise than in telephones, shall be apportioned, and such part thereof as may be justly chargeable to the telephone interest shall be borne by the parties hereto in the proportion above stated, and such part thereof as shall justly be chargeable to other interests shall be borne by the owners thereof.

(2) The party of the second part may, from time to time, acquire such inventions and improvements in telephones as it shall deem advisable, and may introduce such of them as it sees fit into the construction of telephones put out to its licensees, and to reimburse itself for the cost thereof, may charge an additional price to its customers beyond the price then previously charged, but such an increase shall not operate to increase the royalty or bonus payable to the party of the first part hereunder until said second party shall have been so reimbursed, unless said first party shall elect and assent to bear and pay twenty per cent. of such cost. Or if the party of the second part shall deem it advisable not to raise the price as aforesaid, then the party of the first part shall bear, pay and be charged with twenty per cent. of said cost actually and in good faith incurred and paid, and the party of the second part shall bear, pay and be charged with eighty per cent. thereof. Provided, that if such payments are for rights which extend beyond the duration of

this contract, or which are to be applied to purposes other than telephonic, then only a pro rata proportion, according to time or the purpose for which they are used, shall be borne by said first party. And provided further, that if the purchase of any one patent calls for an absolute payment exceeding $10,000, no portion of the excess over that sum shall be charged to the party of the first part, unless it shall consent (and full opportunity shall be afforded it to do so) or it be determined by the board contemplated in Article 2, or by some other competent tribunal, that it should be so charged in respect of such excess; and said board shall so determine if, or so far as they shall find, that said purchase was prudently made for the benefit of the parties hereto. Said second party shall call for said reference, and the referees shall be appointed, and such proceedings shall be had in reference thereto as are provided in said Article 2, so far as they can apply; and the question submitted by the notice calling for said reference shall be determined by the default of the party or the decision of the referees, as therein provided; and the determination so arrived at shall be final and conclusive upon the questions so submitted.

ARTICLE 5. (1) The party of the first part, for itself and those it represents, as aforesaid, hereby grants to the party of the second part, as far as they or either of them have the legal power so to do, an exclusive license during the full terms for which patents thereon have been or may be granted, to make, to use, and to license others to make and to use in speaking telephones, call bells, and switches, and other appliances for use on telephonic lines, any inventions or improvements therein which it, or those whom it represents, as aforesaid, now own or control, in whole or in part, by contract or otherwise, under which it or they have the authority to grant such license, and whether already patented or not, and which the party of the second part shall not otherwise have the right to use; reserving however to the party of the first part, and those it represents, the right to use said inventions in switches, call bells, and appliances other than telephones in connection with the telephones which they are or may become entitled to use under this contract. Instruments or apparatus made under this license shall be deemed to be licensed only for the uses above named and not for any other purpose.

(2) And the first party further agrees to acquire any further inventions adapted to be used in connection with telephones which it may have the right to so acquire under

existing contracts with George M. Phelps and Thomas A. Edison, and to license the second party under the same for use in telephones or on telephone lines, the second party agreeing to pay to said first party in reimbursements whatever the said first party or those it represents may be required to pay therefor under the ninth, tenth, eleventh and thirteenth clauses of the agreement between Thomas A. Edison and the Western Union Telegraph Company, dated May 31, 1878, and whatever it may be required to pay said Edison under the contract between the same parties, dated May 12, 1879, and whatever it may be required to pay George M. Phelps in addition to his salary of $3,300 therein referred to, to acquire his inventions under the contract between him and the Western Union Telegraph Company, dated Jan. 20, 1876, or a due and proportionate part thereof, in case said inventions shall also be applicable to uses and purposes other than telephonic, said licenses to be exclusive during the term of this contract, and to continue but not to be exclusive thereafter; the character and extent of such license shall be taken into account in arriving at a fair proportion of the actual cost thereof.

(3) And if the parties of the first part shall hereafter acquire ownership or control as aforesaid of other inventions adapted to be used in connection with telephones, the second party shall have the right or license to use the same for telephonic purposes, and shall be bound to pay to the party of the first part the cost thereof, or a due and proportionate part of said cost. Such right or license shall be exclusive for telephonic purposes during the whole period of this contract, and shall continue, but shall not be exclusive after its expiration; the character and extent of such license shall be taken into account in arriving at a fair proportion of the actual cost thereof.

(4) Said second party will pay on instruments, which shall be made by or for it, the royalties specified in Schedule A, hereby referred to and made part of this agreement, so far as the first party or those it represents shall be bound to pay the same under the contracts therein referred to, unless it may have the right to make and use such instruments irrespective of this contract and of the contracts referred to in said schedule by reason of the invalidity of the patents therein referred to, or otherwise, in which cases it shall not be deemed to be acting under any license from the party of the first part or those it represents; but it hereby agrees to indemnify the party of the first part and those it repre-

sents for any such royalties it or they may be legally bound to pay by reason of any use by the party of the second part.

(5) This contract shall operate as a release to the parties hereto, and those they represent, and their respective licensees and predecessors, for all claims for infringement of patents on which suits are now pending, in which said parties, or any of their licensees or predecessors are parties, and all claims for infringement of other patents or inventions owned or controlled by them, or either of them, growing out of, or based upon, the manufacture or use of telephones now used in territory to which this contract applies at once; but as to telephones in territory to which it does not apply at once, it is not to operate as such release (and each party stands on its own right in such conflicting territory) until settlements are made and interests harmonized as hereinafter provided, or until the parties hereto agree that it shall operate as a release upon telephones in such localities, and in either of such cases it shall thereupon operate as a release in respect of telephones in such locality.

ARTICLE 6. Except as herein provided, the first party and the companies it represents agree to withdraw from the manufacture, rental and use of telephones.

ARTICLE 7. The party of the first part agrees to give assistance and co-operation in developing and extending the use of the telephones of the party of the second part, and that the party of the second part shall, during the term of this contract, and when in the judgment of the first party it shall not interfere with the enjoyment and use of the same by said first party for telegraphic purposes, have permission to build lines under any franchises, contracts, licenses or rights of way enjoyed or controlled by the party of the first part, or to use any poles, fixtures, structures, or plant of said first party, upon reasonable terms, subject, however, to a revocation of such license to use any poles, structures, fixtures, or plant, at any time, by reasonable notice to the party of the second part.

ARTICLE 8. Whereas it is intended as a part of this agreement that all telephones heretofore put out under lease or under license by and from the party of the first part and those it represents shall, without any exception (except temporarily, where this contract does not at once apply), become the property of and come under lease and license from the party of the second part, and, when so transferred and placed under lease and license in accordance with the terms hereof, shall not be pursued or treated as infringing

instruments in respect of any use thereof prior to the date of this agreement;

And whereas it is also intended that all telephone exchanges which have heretofore been established by the party of the first part or those it represents, or by or under contracts with them or some of them, shall, together with their plant, be transferred to the party of the second part and become its property, and that all interests of the party of the first part or those it represents, whether as holders of stock or other interests in telephone exchanges or corporations or organizations owning or maintaining exchanges, shall be transferred to the party of the second part and become its property, except in the localities named in section (5) of this article;

And whereas the party of the second part of its predecessors, owners of the Bell patents, have heretofore granted certain licenses, and made certain contracts, exclusive in their character to a certain extent, which may render it impracticable or improper for it to so accept and license some of said telephones and exchanges without the consent of the grantees of such previous licenses who are not parties hereto; and whereas the party of the first part, or those it represents, may not be legally able to transfer some of said property or interests without the concurrence of third parties, so that certain of the transfers desired cannot be made or cannot be accepted and the intended licenses given until arrangements or modifications of contracts can be made with one or both the present licensees claiming conflicting rights (as may be necessary in each case), which will permit the transfers and licenses so intended and desired to be made and granted;

Now, therefore, it is agreed as follows:

(1) In the places named in Schedule B hereby referred to and made part of this agreement, in which places it is understood that no such conflict exists, the exchanges and interests in exchanges owned by the party of the first part, or those it represents, and all the property connected with such exchanges, including contracts of the subscribers, and all telephones in said localities shall forthwith be transferred and delivered to and put under lease or license from the party of the second part and paid for by it as hereinafter provided, except that telephones which already belong to the party of the second part are not to be again paid for. All the interest owned by the Gold and Stock Telegraph Company in the American District Telegraph Company at

Boston is to be included in the transfer provided for by this section.

(2) In the places named in Schedule C, hereby referred to and made part of this agreement, in which places it is understood that the party of the first part or those it represents, are sole owners of all the exchanges established and all the telephones put out by or under it or them, but in which the party of the second part has granted licenses which may conflict as aforesaid, the party of the first part and those it represents, will transfer all such exchanges and telephones to the party of the second part, who will accept and pay for said exchanges, and accept, pay for and license said telephones as herein provided, but the party of the second part shall not be required to take, pay for, and license the same as aforesaid, until opportunity has been afforded for the requisite arrangements to be made as aforesaid with its licensees, or it shall elect to accept, pay for, and license the same without waiting for such arrangements to be made.

(3) This contract shall not operate upon nor affect the telephones and exchanges in the places specified in Schedule D until arrangements have been made with owners or part owners of exchanges therein who are not parties hereto, or until the parties hereto shall agree that it shall operate therein. But the provisions of sections (8) and (9) of this article shall apply to such localities. Upon the transfer of said interests the parties hereto, and those represented by them, will use their best endeavors to cause all telephones in said localities, which have been manufactured or furnished by or on behalf of the first party or those it represents, to be transferred to and put under license from the party of the second part as aforesaid, and the same shall thereupon be accepted, paid for, and licensed by said party of the second part as herein provided.

(4) With regard to the price to be paid by the party of the second part to the party of the first part for instruments and all properties and interests to be transferred hereunder, it is agreed as follows: for the instruments specified in Schedule E, hereby referred to and made part hereof, there shall be paid the amounts therein specified respectively, or a proportional part thereof upon the delivery of a portion of said instruments less than the whole number specified, payment to be made upon delivery of the same as herein provided; and in renting such of said instruments as include a transmitter, call bell and switch, being the twenty-two kinds

first named in said schedule, the party of the second part may charge a rent or price for the call bell and switch in addition to the standard rent of the telephone itself, and an amount of such additional rental not to exceed three dollars per annum for a period which shall yield an amount equal to nine dollars on each instrument shall be rated as applying to the call bell and switch in said instruments, and on this amount no royalty or bonus shall be paid to the party of the first part. In addition to the sums specified in said schedule the party of the second part will pay the royalties of twenty or twenty-five cents a switch which have been paid on switches included in said schedule and made under contracts with T. B. Doolittle or H. L. Roosevelt. All exchanges which the party of the first part or those it represents have established and own, and all interests, entire or partial, which are to be transferred hereunder, acquired by them in other exchanges of in corporations owning exchanges, are to be paid for when transferred at the actual cost to the party of the first part or those it represents, at the time of transfer of establishing or purchasing the same, not taking into account any profits or losses in operating the same, nor legal expenses in patent suits. Exchanges and exchange plant (which are to be paid for at actual cost) include wires, lines, poles, fixtures and other appliances, and also all call bells, batteries, switches and switch boards which are in use or on hand fit for use, and are owned and paid for by the exchange, but where the telephone lines have been placed upon poles or fixtures erected for telegraph lines such poles and fixtures are not to be transferred, but the party of the second part may continue to use the same under and subject to the provisions of Article 7. In cases where the value, cost or price remains to be fixed or ascertained, if the same cannot be agreed upon by the parties hereto, it shall be appraised, fixed or determined by two disinterested experts, one to be chosen by each party; and if the two so chosen cannot agree they shall choose a third, and the decision of the majority shall be binding upon the parties.

(5) The undertaking of the party of the first part, and those it represents, to transfer all their interests in telephonic district or exchange systems, and corporations or organizations owning them, shall not be held to include the stock interests of said first party and those it represents in the Philadelphia Local Telegraph Company," the "Central District and Printing Telegraph Company" of Pittsburg, the "Gold and Stock Telegraph Company of California,"

the "Michigan District Telegraph Company" of Michigan, which companies have some interests in telephonic exchanges; nor to include their interests in the properties (other than telephones) in the exchanges within thirty-three miles of New York City Hall. The party of the first part and those it represents will, as soon as local conflicting interests can be harmonized, transfer to and put under lease and license from the party of the second part, upon its acceptance and payment for the same as herein provided, all telephones in said New York territory, and in the localities covered by the companies above mentioned, and will use their best endeavors to procure this to be done as soon as possible.

(6) As to all telephones heretofore put out by the party of the first part or those it represents, for uses for which it or they are entitled to be furnished with telephones as provided in Article 14, they shall transfer the title in the same to the party of the second part, and thereupon shall receive leases and licenses for the same in accordance with this contract, and the party of the second part shall pay for such telephones as herein provided. In all cases where the party of the first part or those it represents are to be licensees of telephones now out and the title in which under the provisions hereof is to be transferred forthwith, they shall begin to pay the rental and royalty thereon, and licenses shall issue as from the day this agreement takes effect, and at the present recognized standard rate until some other shall be established in accordance with the provisions hereof. But any such telephone which cannot be so transferred, accepted and licensed, by reason of conflicting or inconsistent rights heretofore granted by the owners of the Bell patents to their licensees, shall not be paid for, nor shall the rent or royalty thereon begin until such conflicting interests can be harmonized as herein provided so as to permit such transfer, unless said second party shall elect sooner to take, pay for and license the same; and until such transfer the provisions of this contract shall not apply to any telephone so situated, and the party of the first part and those it represents shall, in the meantime, stand as they would have done with reference thereto had this contract not been made.

(7) All telephones as to the transfers of which special provision has not been hereby made, are to be transferred to and paid for by the party of the second part, and by it licensed directly to customers and users forthwith in the manner and with the effect herein provided, or as soon as practicable, as aforesaid.

(8) With respect to the telephones and the telephone exchanges and properties and interests the transfers of which may be delayed by reason of conflicting claims or interests as hereinbefore provided, it is agreed that both parties will use their best endeavors and due diligence to arrange with their respective licensees and associates such modifications of existing obligations as will allow said transfer to be made at the earliest possible date. Until such time the parties of the first part will not transfer any of said properties (except so far as existing contracts may legally require them) to any person or party, unless approved by the party of the second part.

(9) And the party of the first part, for itself and those it represents, agrees that previous thereto any of said exchange properties shall be transferred at said cost price, on request, to any party approved by the party of the second part who shall not be a competitor in the telegraph business with the Western Union Telegraph Company, suitable provision first being made to protect from oppression the rights and interests of local and associate owners of the exchanges and exchange plant.

(10) And said first party also agrees that suitable accounts, statements and information shall be seasonably furnished to the party of the second part, for the purpose of, or to assist in ascertaining the price to be paid for all properties and instruments which the party of the second part is to or may take and pay for under this contract.

(11) Telephones which have been sold by the party of the first part, or those it represents, to institutions of learning and to the government of the United States, shall be deemed to be licensed by the party of the second part, and shall not be made the basis of any claim for infringement.

ARTICLE 9. As to each locality named in Schedules C and D in which the transfer of the exchanges and telephones may be delayed, as provided in sections (2) and (3) of Article 8, and as to each locality mentioned in section (5) of said article in which the transfer of telephones may be delayed as provided in said article, and as to all telephones (not used on exchanges) in localities where the acceptance of telephones is delayed, as provided in (6) and (7) of said article, it is agreed, so far as the conflicting class may extend, that, until the time shall arrive for the transfer for such locality to be made, as in said sections is provided, the parties hereto respectively, and the owners or users of telephones or telephonic appliances claiming or holding under persons whose

claims create the conflict and give rise to the delay, shall not have the benefit of any immunity or protection from suits by reason of this agreement, or anything done hereunder or in consequence hereof, unless and until the parties hereto shall otherwise determine by a writing hereafter to be made; and nothing herein contained shall operate directly or indirectly, expressly or impliedly, as a license to any such person or party to use telephones or telephonic appliances within such locality, nor shall it any way interefere with or affect the obligations which the parties to this agreement may be under respectively to their said licensees or with any rights of the first party to supply telephones in such conflicting territories as provided in Article 11. No royalty or bonus shall be paid in respect of telephones used within such localities and not entitled to the protection hereof, unless actually accepted and licensed as provided in Article 10.

ARTICLE 10. (1) All telephones and apparatus which are to be taken, paid for and licensed by the second party hereunder shall be placed under written leases and licenses from it, in such form and at such rentals as said second party shall establish under the provisions of this contract, not different from those at the same time established for other telephones used for like purposes; and the transfer shall not be deemed to be complete, nor shall the second party be required to accept, pay for, or license any instrument until it shall be pointed out, ear-marked, and such delivery made of it as the nature of the case will permit. No telephone shall be deemed to be accepted and licensed under the patents of the party of the second part, nor shall any person be entitled to any immunity whatsoever from claims for infringement of any patent by reason of the manufacture or use of such telephone, nor shall it be required to be paid for by the party of the second part until it shall be so delivered and put under written lease or license hereafter to be made, or delivered into the actual possession of the party of the second part, or shall be designated, ear-marked and offered to be put under such lease and license by the parties entitled so to do, including the party in actual possession and the party undertaking and bound to pay rental and royalty therefor. When any telephone shall be so accepted, leased and licensed, or shall be so offered within three months from the date hereof, and, under the provisions of this contract, be required to be accepted and paid for, its manufacture and use, prior to such time, shall not be made the basis of any claim for infringement of any patent.

(2) But the second party may, at any time it sees fit, after the expiration of six months from the date hereof, take from the party of the first part or those it represents any existing telephone (except those which the party of the first part or those it represents are entitled to have and use under the provisons of Article 14, and those which under Article 9 are temporarily excepted from the effect of this contract), with the existing license or contract for license for the same, with all the rights of the owner or licensor, by a written notice to that effect given to the party in actual possession of the telephone, and also to the party of the first part, and thereupon it shall be entitled to receive the rental and royalty therefor, and be bound to take and pay for the same as herein provided; in such cases the bonus or royalty to be paid to the party of the first part under Article 1, during the continuance of such existing lease and license, shall be twenty per cent. of the rental actually received under the terms thereof; and in respect of all rights and interests transferred as provided in this article, said second party may, so far as necessary, but at its own expense, use the name of the first party, or those it represents, to maintain and enforce all the rights and interest legally or equitably coming to it upon or by such transfer.

(3) The rental of the telephones transferred or required to be transferred to the party of the second part hereunder shall, from the time such transfers shall be or ought to be made, accrue to and be collected by said second party, subject to the payment and allowance of the royalty, bonus, and commissions hereinbefore provided; when all such transfers have been made and the conflicting interests of the respective licenses shall have been so far harmonized as to enable said first party to cease to manufacture and supply telephones as provided in Article 11, then said second party will receive and pay for all the remaining property belonging to said Gold and Stock Telegraph Company and American Speaking Telephone Company, of the character specified in Schedule E, at the prices therein stated. All telephones made for use after Nov. 1, 1879, are to be paid for at actual cost when transferred.

ARTICLE 11. (1) The first party reserves all such rights as it now possesses to continue to manufacture and supply its own telephones, nothwithstanding the stipulations of this contract, to its own exchanges already established and in actual operation and subscribers thereto, and to its licensees, until the local conflicting interests between the respective li-

censees of the two parties hereto can be harmonized; and until any property of said first party at such places shall be turned over to said second party and paid for, as hereinbefore provided; but said first party shall organize no new exchanges, nor grant any new or additional licenses (except to additional subscribers to exchanges already established) creating new or additional conflicts or complications, except within the radius of thirty-three miles from New York City Hall, and within the territory covered by the Ormes contract hereinafter referred to; and such places, where such conflicting interests of licensees exist shall, until they can be so harmonized, be exempt from the operation of this contract as aforesaid.

(2) But it is distinctly understood as an essential feature of this contract that all the telephone district or exchange systems, except those within the radius of thirty-three miles from New York City Hall, and within the territory covered by said Ormes contract, are to be transferred to and accepted by the party of the second part at the earliest possible day, and that their continuance in the hands of the party of the first part during the meantime is merely to give an opportunity for local interests to become harmonized, and to avoid inconvenience to the public, and not as a source of revenue or advantage to the party of the first part or those it represents.

ARTICLE 12. (1) The right to all uses of the telephone on wires of a district or exchange system is to remain exclusively with the party of the second part, excepting such temporary suspension of the application of this contract to certain localities, as has been already herein provided for.

(2) For the purpose of this contract it is agreed that an "exchange" or a "district or exchange system" applies to a system in which different stations on the same or different circuits, and either within any city or town, or within a radius of fifteen miles of a central office (or within wider limits, where existing contracts have granted wider limits), are connected with such central office or branch offices within said territory for the purpose of placing subscribers or other parties by such circuits in communication with such central or branch offices, or with each other, either directly or through the agents of the system.

ARTICLE 13. (1) The right to connect telephonic district or exchange systems for the purpose of personal conversation between persons at the instruments, and the right to use telephones on all lines not forming a part of a telephonic dis-

trict or exchange system for such personal conversation (except so far as licenses for private lines are to be granted to the party of the first part under Article 14) are to remain exclusively with the party of the second part, and those licensed by it for the purpose.

But such connecting and other lines are not to be used for the transmission of general business messages, market quotations, or news for sale or publication in competition with the business of the Western Union Telegraph Company, or with that of the Gold and Stock Telegraph Company. And the party of the second part, so far as it lawfully and properly can prevent it, will not permit the transmission of such general business messages, market quotations, or news for sale or publication, over lines owned by it, or by corporations in which it owns a controlling interest, nor license the use of its telephones or patents for the transmission of such general business messages, market quotations, or news for sale or publication, in competition with such telegraph business of the Western Union Telegraph Company or that of the Gold and Stock Telegraph Company.

(2) The terms "general business messages" and "telegraph messages," or "messages for hire," are defined to mean all communications in behalf of other parties than those who directly communicated by the telephone by themselves or their servants or agents personally present at the instruments; and no person engaged in the business of transmitting messages for other parties shall be authorized or knowingly allowed by the party of the second part, or it servants or agents, to transmit such messages through the telephone.

(3) It is, however, understood that the stipulations of this contract relating to the transmission of telegraph messages shall not operate to restrain the renting of telephones by the party of the second part to railroad companies for strictly railroad messages, or for general business messages in connection with the Western Union Telegraph Company or its auxiliary corporations or organizations, nor so as to restrain, impair or affect the right of the party of the second part to use telephones by themselves or their licensees for all purposes in territory not occupied or covered by the Western Union Telegraph Company or its auxiliary corporations or organizations, nor for contracting with the Northwestern Telegraph Company and other companies as to territory not occupied or covered by the Western Union Telegraph Company or its auxiliary corporations or organizations at the time such contracts or licenses are made, or with the govern-

ment for lines in the territories, or for government lines for government messages in the States. For the purposes of this contract the Western Union Telegraph Company is deemed to occupy and cover all the thirty-eight States of the United States, the District of Columbia and the Territories of Washington and Utah, except the Territory of the Montreal Telegraph Company, to wit, that part of the State of New York which is west of Lake Champlain and north of a line drawn from Whitehall to Oswego, and except the Territory of the Northwestern Telegraph Company, to wit State of Wisconsin (except the line between Chicago and Milwaukee), the State of Minnesota, that part of Iowa which is north of Sioux City, and the upper peninsula of Michigan, and except all that part of Florida which is not reached by the lines of the International Ocean Telegraph Company, or of the Western Union Telegraph Company.

(4) The party of the second part will not knowingly grant any license to use telephones for any purpose for which it agrees not to use them as specified in this article, and it will insert in all its licenses such apt and suitable restrictions as under the advice of counsel are deemed reasonable and proper to that end, and upon notices of any breach thereof will use all reasonable means to enforce the performance and observance of the same. But it is understood that the party of the second part is not to be held responsible for any breach of the stipulations of this Article and Article 15 of this contract not committed by its officers or servants unless it had reasonable notice and failed to use reasonable means to prevent it.

(5) The whole expense of litigation, if any shall arise with third parties in consequence of the stipulations of this article relating to the transmission of general business messages, market quotations, or news for sale or publication, or acts in pursuance thereof, or attempts to enforce the same, shall be borne by said Western Union Telegraph Company. Said last-named company shall also have control of all such of said suits as do not bring in question the validity, construction, or effect of, or title to, the patent rights of the party of the second part, or any of them, whether held by ownership or license, and for that purpose it shall be the duty of said second party to give due authority to such counsel and such attorneys in law or in fact, as the Western Union Telegraph Company may nominate to institute, appear in and conduct such suits, in the name of the second party if necessary.

ARTICLE 14. (1) The party of the second part will fully license the party of the first part to use telephones procured from it for transmitting telegraph messages, and for use on private lines, with the right to sublet the use thereof along with such private lines, for such purposes as such private lines have been and are being used, except in territories where exclusive agency contracts inconsistent with this agreement to license already exist, and during the continuance of such agencies, in which cases they may obtain them from such agents.

(2) For the purposes and uses aforesaid, the party of the first part shall be furnished with telephones, with licenses from the party of the second part to use such telephones and other inventions owner or controlled by it for use in connection with telephone lines, on terms which may be established from time to time, and which shall be as favorable as those on which they are furnished to any other parties for like uses, and shall be allowed a discount as provided in Article 2.

(3) The party of the second part shall have the right from time to time to incorporate in its leases and licenses such apt and suitable stipulations as it may deem requisite for the control, preservation, and protection of its telephones in the hands of licensees, to secure the payment of royalties and rentals, to protect itself against the application and use of telephones for uses different from those for which they are rented or licensed, and to aid it in protecting the patents owned by it or under which it has licenses, and its title thereto, from infringement or attack, and it may prescribe and require the party of the first part to incorporate such stipulations into all licenses, leases and sub-leases of telephones, granted by it; but no stipulations shall be incorporated in the licenses and leases to the party of the first part or prescribed as aforesaid, for the licenses and leases to be granted by it, different from those in use for other licenses for like purposes.

(4) For the purpose of this contract "private lines" are understood to refer to telephone lines, each consisting of a single circuit on which telephones are to be used for the individual and private business of the individuals, business firms or corporations leasing the same. Such telephones are not to be used by any other parties than those leasing them, except on business of the parties so leasing, nor is any business to be transacted by or through them, for a consideration or toll to be paid by other persons than those so leasing

them. Such private lines or circuits shall not extend more than twenty-five miles beyond the municipal limits of the city or town in which one end of the line is situated, nor shall any one line or circuit be used for more than two individuals, firms or corporations at each end, nor shall any two or more lines or circuits be connected.

ARTICLE 15. (1) The second party will turn over and deliver to the Western Union Telegraph Company of the first part, or its agents, exclusively, all messages for transmission to other points by telegraph, collected by or coming on the wires or within the control of its telephonic exchanges or district systems or those of its licensees, wherever the first party has wires and is prepared to receive or transmit the same, so far as said second party can lawfully control the same, and unless otherwise specially directed by its customer; but will not solicit such special direction nor receive and pay tolls for transmission over other lines, unless compellable by law so to do. And the first party shall forward the same to destination, subject to its established rules and regulations, upon payment of regular tolls, and pay to said second party a commission of fifteen per cent on all the tolls received for transmitting such messages over its lines; the commission not to include tolls for the transmission over other lines, nor tolls for transmitting cable messages. For delivery service of telegraphic messages made through said second party or its licensees and for collecting through a messenger service for delivery to said telegraph company, the party of the first part will pay a fair compensation, the same that is paid to district telegraph companies for similar services.

(2) If the second party, for the purpose of doing a general telegraph or telephone business, shall connect a telegraph station of the Western Union Telegraph Company by a branch line with any place in territory occupied or covered by the Western Union Telegraph Company which has no Western Union line or office, it shall turn over and deliver to the Western Union Telegraph Company, exclusively, so far as it has legal power to control the same (unless it be specially directed by the customer sending the same that they be forwarded by some other route), all messages collected from such points so connected. And said Western Union Telegraph Company will, as hereinafter provided, receive and forward the same upon payment of regular tolls, and pay to the second party or its agents a commission of ten per cent upon the tolls received for transmitting such messages over the Western

Union Telegraph lines (cable messages excepted from such commission); and there shall be added to the rate of tolls to be collected from customers a further rate, not exceeding ten cent per message of ten words on such branch lines of the length of ten miles or less, and five cents additional per message of ten words for each additional ten miles or fraction thereof in length of said branch lines, and at the same rate for longer messages such tolls so added shall belong to the party of the second part.

(3) When the second party shall have constructed such branch lines to such new points within the territory occupied or covered by the Western Union Telegraph Company, but not theretofore reached by its telegraph lines, and the telegraph company of the first part shall thereafter elect to construct its lines of telegraph to such new points, it shall if required by said second party, take and pay for the lines of the second party at cost, and also pay said second party the commission provided in section (2) of this article on all the business taken at such point for the period of twelve months thereafter. But if the party of the second part shall elect to keep its own lines, the provisions contained in Article 13 against the transmission of general business and other messages shall apply to such line.

(4) Where any messages are to be delivered between the parties through the telephone, said party of the first part is to afford to the party of the second part, at the expense of the second party, the facilities for providing a telephone connection between its office and the office of the district exchange or branch line, and shall at its own office, without further cost to the party of the second part or its licensees, receive or transmit said messages over said connecting line by its own clerks, who for that purpose shall be the agents of the second party and subject to its rules and regulations.

(5) It is also agreed by the party of the first part, for itself and those it represents, that it will not connect its telegraph lines with any telephonic district or exchange system other than those licensed by the party of the second part, so far as it lawfully can refrain from so doing, except in districts and during the time temporarily excepted from the operation of this contract.

(6) All messages or communications of customers delivered by either of the parties to the other for further transmission over its telegraph or telephone lines, as the case may be, shall be deemed to have been delivered and received subject to such established rules, regulations and conditions

of the receiving company as may have been established and promulgated by it for the government of its business and not otherwise; and for the purpose of regulating and limiting the responsibility of the party receiving from the other a message or communication in this manner, it shall be the duty of the company receiving the message directly from the customer to require his assent to such rules, regulations and conditions of the other company by writing his message or communication upon the regular contract blanks of such company, or blanks containing an equivalent contract, or in such other manner as may be generally required by such company for that purpose from its direct customers; and if either company, dealing with the customer in the first instance, shall fail in the duty last above stipulated, it shall hold the other company harmless from all claims for damage which it may be compelled to pay to the customer because of the absence of a contract arrangement with such customer subjecting the business in question to such established rules, regulations and conditions of the company thus rendered liable to the customer; the object of this stipulation being to limit the responsibility of each party to matters happening upon its own lines, and to secure the regulations of that responsibility in respect to all business originating beyond its own lines, in the same manner as such responsibility shall be regulated in respect to business beginning, continuing and terminating upon its own lines. Whenever any such rules, regulations or conditions shall be established or modified by either party the same shall be notified to the other party.

ARTICLE 16. The existing suits and interferences shall be disposed of as counsel of the parties of the first and second part may advise, to recognize and protect the rights of the several inventors to their respective inventions, subject to the orders of the courts and the decisions of the Patent Office.

ARTICLE 17. This contract shall go into effect as of the first day of November, 1879, and shall be and remain in force until the expiration of seventeen years thereafter. It shall cover the whole territory of the United States, except that included in the Ormes contract (which territory shall be included in this contract upon the expiration of said Ormes contract), and those conflicting localities hereinbefore referred to and temporarily excepted, and shall cover them as soon as those exceptions expire. Said Ormes contract is a contract dated Aug. 26, 1879, to which James M. Ormes, the Western Union Telegraph Company acting for the same parties as in this contract, and the National Bell Telephone

Company are parties. The territory covered by it is as follows: West Virginia south of the Baltimore & Ohio Railroad, Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama. For the further contents of said contract, so far as is material reference thereto is hereby made.

ARTICLE 18. (1) The party of the second part shall keep in regular books for that purpose, accounts of the number of telephones manufactured, licensed, and put out for use in the United States, and also of the rentals received and commissions or allowances paid or allowed as herein provided, and of the number manufactured and sold in foreign countries and the amount received therefor. And said accounts shall, at regular quarterly intervals and at all reasonable times, be open to inspection by the party of the first part, for the purpose of ascertaining the royalties or bonus due hereunder and of verifying the accounts rendered, and copies of said accounts shall be rendered at the time of the quarterly accounting. Tolls collected by the one party for the other and commissions on telegraph business, shall be paid monthly at the place where business is exchanged. All accounts for royalties, and all other unsettled accounts shall be settled, and the balance paid on the first day of February, May, August and November, up to the first day of the preceding month. All such accounts shall be verified by oath of the person having the best knowledge of the facts. Payments of the balances resulting from such accounts shall be made to the treasurer of the Gold and Stock Telegraph Company as representatives of the party of the first part, or the treasurer of the second party, as the case may be, or such other persons in Boston or New York as the respective parties may from time to time appoint. Such persons shall have authority to settle all said accounts, and to receipt for the money.

(2) The party of the first part or its said representative is to be promptly notified of all reductions of rentals.

ARTICLE 19. It is understood and agreed that nothing herein contained shall be construed as imposing upon either party any obligation to do or not to do at any time anything contrary to law; and if anything herein covenanted or contemplated to be done or not to be done shall be or become contrary to the law of the land, the consequent inability and failure to perform the same shall not operate as a dissolution of this contract, nor to give to either party a right of action against the other.

ARTICLE 20. All the provisions and stipulations herein contained and described as incumbent on or for the benefit of the parties hereto shall be incumbent on or for the benefit of their respective successors or assigns.

IN WITNESS WHEREOF said Western Union Telegraph Company hath caused these presents to be subscribed by its president, and its corporate seal to be hereto affixed by its secretary, and said National Bell Telephone Company hath caused its corporate seal to be hereto affixed by its clerk and these presents to be subscribed by its president and treasurer on the day first above written.

THE WESTERN UNION TELEGRAPH COMPANY,
By NORVIN GREEN, *Pres.*

(Seal)
(Western Union)
(Tel. Co.)

Attest: A. R. BREWER, *Secretary.*

THE NATIONAL BELL TELEPHONE COMPANY,
By W. H. FORBES, *President.*
GEO. L. BRADLEY, *Treasurer.*

(Seal)
(National Bell)
(Telephone Co.)

Attest: CHAS. EUSTIS HUBBARD, *Clerk.*

The above-named Gold and Stock Telegraph Company, American Speaking Telephone Company, and Harmonic Telegraph Company, hereby acknowledge the authority of the Western Union Telegraph Company to represent and act for them in the matters embraced in the foregoing contract, and agree to be bound by and to carry out its provisions, it being understood and agreed by and between said named parties that the royalty and bonus upon telephones, herein provided to be paid to the said Western Union Telegraph Company, shall be paid to the said Gold and Stock Telegraph Company for the use and benefit of said American Speaking Telephone Company.

In witness whereof said parties have severally caused these presents to be subscribed by their respective presidents, and

their corporate seals to be hereto affixed by their respective secretaries on the day of the date of said contract.

(Seal)
(Gold & Stock)
(Tel. Co.)

THE GOLD AND STOCK TELEGRAPH COMPANY,
By GEORGE B. PRESCOTT,
Vice-President.

Attest: J. D. REID, *Secretary.*

THE HARMONIC TELEGRAPH COMPANY,
By E. W. ANDREWS,
President.

(Seal)
(Hormonic)
(Telegraph Co.)

Attest: H. H. DUNCKLEE, *Secretary.*

THE AMERICAN SPEAKING TELEPHONE COMPANY,
By NORVIN GREEN,
Vice-President.

(Seal American)
(Speaking)
(Telephone Co.)

Attest: J. D. REID, *Secretary.*

SCHEDULE A.

The royalties which are referred to in (4) of Article 5 are: A royalty of twenty cents per switch under a contract between the Western Union Telegraph Company and Thomas B. Doolittle, dated June 14, 1879, relating to said Doolittle's patent No. 209,115, granted October 22, 1878. The Western Union and Gold & Stock Telegraph Companies have, under said contract with Mr. Doolittle, made and paid him royalty on upwards of 5,000 of these switches. A royalty of twenty-five cents upon each telephone embodying any of the inventions or improvements covered by the patent No. 218,582, granted to Sidney H. Short, Aug. 12, 1879, under contract between the Gold and Stock Telegraph Company and said Short, dated Aug. 22, 1879.

A royalty of twenty-five cents on each automatic switch

which shall be made or used by the party of the second part under H. L. Roosevelt's patent, No. 215,837, of May 27, 1879, by virtue of the license contained in Mr. Roosevelt's letter to Mr. George P. Prescott, dated June 21, 1879.

The party of the second part does not hereby admit the validity, effect, or value of any of said patents.

Schedule B.

Places where the Western Union Telegraph Company or the Gold and Stock Telegraph Company have established exchanges or leased telephones, and the owners of the Bell patents have granted no exclusive rights to other parties, or where the Western Union Telegraph Company or Gold and Stock Telegraph Company have brought the Bell licenses, or interests therein.

No hostile interests are here to be reconciled, and the transfers may take place at once.

1. Places where exchanges were established and are owned by the Western Union Telegraph Company, and on which the telephones of the American Speaking Telephone Company are used:

Atchison, Kan.
Akron, N. Y.
Auburn, N. Y.
Boston, Mass.
Chester, Pa.
Concord, N. H.
Danville, Ill.
Decatur, Ill.
Davenport, Iowa.
Defiance, Ohio.
Evansville, Ind.
Galveston, Tex.
New London, Conn.
Houston, Tex.
Kansas City.
Independence, Mo.
Lafayette, Ind.
Leavenworth, Kan.
Little Rock, Ark.
Moline, Ill.
Meriden, Conn.

Pekin, Ill.
Pittsfield, Mass.
Portland, Me.
Providence, R. I.)
Pawtucket, R. I.)
Rock Island, Ill.
Richmond, Ind.
Rutland, Vt.
S. Norwalk, Conn.
Springfield, Ill.
Stamford, Conn.
St. Louis, Mo.
Topeka, Kan.
Washington, D. C.

2. Places where the Western Union Telegraph Company has acquired a part or the whole of the interest of the Bell licensees:

Bridgeport, Conn., the whole.
Columbus, Ohio, " "
St. Louis, Mo., majority interest.
Providence, R. I.) " "
Pawtucket, R. I.) " "

The Gold and Stock Telegraph Company own the telephone exchange in Boston. The stock owned by the Gold and Stock Telegraph Company in the American District Telegraph Company of Boston is to be transferred with the Boston Exchange.

Schedule C.

Places where the Western Union Telegraph Company, or the Gold and Stock Telegraph Company have established and own exchanges, or have leased telephones, and where the owners of the Bell patents have granted rights to other parties under which those other parties might object to the use of the telephones put out by the Western Union Telegraph Company, or the Gold and Stock Telegraph Company. In these cases, the Western Union Telegraph Company, or the Gold and Stock Telegraph Company could transfer at once, but the interests or obligations of the National Bell

Telephone Company require that it shall have an opportunity to arrange with those licensees:

Bloomington, Ill.
Dayton, Ohio.
Fort Wayne.
Syracuse, N. Y.
Fayetteville, N. Y.
Fall River, Mass.
Hartford, Conn.
Indianapolis, Ind.
Keokuk, Iowa.
Lockport, N. Y.
Manchester, N. H.
New Haven, Conn.
Niagara Falls, N. Y.
Norwich, Conn.
Peoria, Ill.
Rochester, N. Y.
St. Joseph, Mo.
Tonawanda, N. Y.
Trenton, N. J.
Cincinnati, Ohio.

SCHEDULE D.

Places where exchanges have been established, and have used telephones furnished by the Gold and Stock Telegraph Company.

(1) Exchanges in which the Western Union Telegraph Company owns a stock interest:

Albany and Troy Territory, N. Y.
Newburgh, N. Y.
Worcester, Mass.
Springfield and Holyoke, Mass.
Cleveland, Ohio.
Erie, Pa. (American District Co.)
Louisville, Ky. (Contract made but no instruments furnished.)
Denver, Colorado.
Central City, "
Black Hawk, "
Golden, "
Georgetown, "
Leadville, "

(2) Exchanges established and using telephones furnished by the Gold and Stock Telegraph Company, but in which neither the Western Union Telegraph Company nor the Gold and Stock Telegraph Company have any interest:

Buffalo and Williamsville, N. Y.
Chicago, Ill.
Dubuque, Iowa.
Des Moines, "
Milwaukee, Wis.
Toledo, Ohio.
Lawrence, Mass.
Quincy, Ill.
Utica and Suburbs, N. Y.
Poughkeepsie, "
Camden, N. J.
Wilmington, Del.

Memo. The owners of the Bell patents have granted licenses, or made agency contracts for the Albany and Troy district, Worcester, Springfield and Holyoke, Cleveland, the six towns in Colorado, Buffalo and Williamsville, Detroit, Milwaukee.

SCHEDULE E.

No. 26. PHELP'S BATTERY-EDISON SET. For private wires, on desk case, with jointed arm transmitter and bell call; has fork for one hand or crown telephone, with automatic switch. Calls worked by battery.
Number of instruments, 707: Price $5,588.67

No. 2. BERGMANN'S BATTERY-EDISON SET. For private wires, in square box, with stationary bevel transmitter and bell call. Has forks for two hand or crown telephones; switches all automatic, except lightning cut-off. Calls work by battery.
Number of instruments, 100: Price $ 787.50

No. 25. PHELPS'S BATTERY-EDISON SET. For private wires, on desk case with jointed arm transmitter and sounder call. Has fork for one hand or crown telephone, with automatic switch. Calls worked by battery. (No more of this style made now.)
Number of instruments, 469: Price $4,834.13

No. 31. PHELPS'S BATTERY-EDISON SET. For private wires, on desk case, with jointed arm transmitter and repeating sounder. Same as style No. 25, except that

the sounder has repeating points for extra local and bell. (No more of this style made now.)
Number of instruments, 48: Price $ 522.00

No. 33. PHELPS'S BATTERY-EDISON SET. For exchange customers, on desk case, jointed arm transmitter and bell call. Has fork for one hand or crown telephone. Hand switch to turn when using telephones. Bell magnets, 10 ohms, worked by calling battery at Central Office.
Number of instruments, 110: Price $1,023.75

No. 34. BERGMAN'S BATTERY-EDISON SET. For exchange customers, in square box, stationary bevel transmitter and bell call. Has forks for two hand or crown telephones; has no switches to turn; all are automatic. Bell magnets, 10 ohms, worked by calling battery at Central Office.
Number of instruments, 1,027: Price $7,325.25

No. 29. PHELPS'S LONG-LINE MAGNETO-EDISON SET. In octagon case, jointed arm transmitter. Has magneto calling apparatus.
Number of instruments, 76: Price $1,061.85

No. 21. PHELPS'S LONG-LINE MAGNETO-EDISON SET. In square box, with stationary bevel transmitter and forks for two hand telephones. Magneto calling apparatus.
Number of instruments, 100: Price $1,350.00

No. 27. PHELPS'S SHORT-LINE MAGNETO-EDISON SET. In octagon case, with jointed arm transmitter. Magneto calling apparatus.
Number of instruments, 202: Price $2,423.25

No. 16. PHELPS'S SHORT-LINE MAGNETO-EDISON SET. In octagon case, with box telephone inside and hand transmitter on cord. No hand telephone is used with this set, the box telephone being used as a receiver.
Number of instruments, 326: Price $5,623.50

No. 23. UNIVERSAL DESK SET. Latest style, with call bell and switch.
Number of instruments, 6,238: Price $42,248.03

CHICAGO EDISON BOX SET. Call bell and switch.
Number of instruments, 760: Price $7,095.00

No. 20. PHELPS'S SHORT-LINE MAGNETO-EDISON SET. In square box, with stationary bevel transmitter and forks for two hand telephones. Magneto call.
Number of instruments, 500: Price $5,437.50

No. 3. PHELPS'S LONG-LINE MAGNETO-COMBINATION SET. In octagon case, box telephone inside and fork for one hand or crown telephone. Magneto call.
Number of instruments, 502: Price $7,516.50

No. 6. PHELPS'S SHORT-LINE MAGNETO-COMBINATION SET. In octagon case, box telephone inside and fork for one hand or crown telephone. Same as No. 3. Magneto call.
Number of instruments, 172: Price $1,999.50

CHICAGO EDISON BOX SET FOR EXCHANGE CUSTOMER. Call bell, switch and transmitter.
Numer of instruments, 2,100; Price $14,006.25

CHICAGO EDISON BOX SET FOR P. L. Sounder call, switch and transmitter.
Number of instruments, 780: Price $7,835.63

CHICAGO EDISON BOX SET FOR P. L. Relay, bell, switch and transmitter.
Number of instruments, 603: Price $6,202.69

BOSTON EXCHANGE SETS. Same as style No. 33, with slight difference in connection.
Number of instruments, 100: Price $ 675.13

CALIFORNIA MAGNETO HAND TELEPHONE.
Number of instruments, 913: Price $2,783.40

CALIFORNIA EDISON DESK SETS. With bell call.
Number of instruments, 802: Price $7,518.75

CALIFORNIA EDISON RELAY SETS. Same as Chicago relay sets.
Number of instruments, 27: Price $ 415.23

No. 14 PHELPS'S BATTERY-EDISON SET. For Morse wires, on desk case, without call, with jointed arm transmitter and automatic loop switch. To be used where a Morse set or other means of calling are available.
Number of instruments, 596: Price $3,310.50

CALIFORNIA EDISON DESK SET. Without call.
Number of instruments, 76: Price $ 484.50

No. 28. PHELPS'S BATTERY-EDISON SET. For central offices, on desk set, with jointed arm transmitter, and without switch or call. No arresters. To be used in central office for switching into branch lines, to listen for messages. Has fork for one hand or crown telephone.
Number of instruments, 4,201: Price $18,737.40

No. 12. BERGMANN'S BATTERY-EDISON SET. For central offices, in square box, with stationary bevel transmitter and without call. For same purpose as No. 28, but has forks for two hand or crown telephones.
Number of instruments, 164: Price $ 828.00

No. 18. PHELPS'S NEW MAGNETO CALL BOX.
Number of instruments, 17: Price $ 102.00

No. 10. PHELPS'S LONG-LINE MAGNETO CALL BOX. In octagon case, automatic switch and forks for two hand telephones.
Number of instruments, 396: Price $5,401.88

No. 11. PHELPS'S LONG-LINE MAGNETO CALL BOX. In octagon case, hand switch and forks for two hand telephones.
Number of instruments, 446: Price $4,683.00

No. 9. PHELPS'S LONG-LINE MAGNETO CALL BOX. In square case, with double bells and fork for one telephone with automatic switch. An old style of box which is now obsolete.
Number of instruments, 177: Price $2,335.13

No. 7. PHELPS'S SHORT-LINE MAGNETO CALL BOX. In octagon case, with plug switches and forks for two telephones.
Number of instruments, 279: Price $2,092.50

No. 8. PHELPS'S OLD-STYLE MAGNETO CALL BOX. In square case, with single bell. An old style now obsolete.
Number of instruments, 29: Price $ 380.63

No. 1. PHELPS'S DUPLEX TELEPHONE. A hand magneto telephone, to attach to the various sets.
Number of instruments, 3,201: Price $9,912.60

No. 4. PHELPS'S CROWN TELEPHONE. A hand magneto telephone, to attach to the various sets.
Number of instruments, 1,945: Price $5,105.63

No. 5. PHELPS'S DOUBLE-CROWN TELEPHONE. An extra strong magneto telephone, to hang against a wall or box.
Number of instruments, 33: Price $ 206.44

No. 15. PHELPS'S CARBON TRANSMITTER. With iron handle, to attach to sets with a cord.
Number of instruments, 77: Price $ 172.95

No. 24. PHELPS'S CARBON TRANSMITTER. To fit his jointed arm.
Number of instruments, 46: Price $ 99.19

No. 17. PHELPS'S BEVEL CARBON TRANSMITTER. To attach to his box sets.
Number of instruments, 10: Price $ 101.25

No. 13. BERGMANN'S BEVEL CARBON TRANSMITTER. To attach to his box sets.
Number of instruments, 45: Price $ 109.31

No. 19. ALL EXPERIMENTAL INSTRUMENTS are classed under this head.
Number of instruments, 72: Price $ 554.51

No. 22. PONY CROWN HAND TELEPHONE.
Number of instruments, 15,101: Price $17,223.57

No. 30. PHELPS'S MICROPHONE.
Number of instruments, 400: Price $ 855.00

No. 32. SWITCHMAN'S TELEPHONE, with Induction Coil.
Number of instruments, 223: Price $1,273.13

CHICAGO STYLES. GRAY BI-POLAR HAND TELEPHONE. Not made now.
Number of insruments, 384: Price $7,366.61

GRAY BATTERY HAND TELEPHONE. Not made now.
Number of instruments, 204: Price $1,087.50

GRAY BATTERY CALL BOX. Not made now.
Number of instruments, 100: Price $1,200.00

CHICAGO MAGNETO CALL BOX. Not made now.
Number of instruments, 684: Price $5,997.56

The prices stated are the prices which are to be paid for the number of instruments stated; or a proportional part thereof is to be paid if the number of instruments varies from that stated.

At a special meeting of the stockholders of the National Bell Telephone Company, held at the company's office, No. 95 Milk Street, Boston, Mass., on Friday, Oct. 24, 1879, at 11 o'clock A. M., present, a legal quorum, it was

"Voted: That the president, treasurer and clerk of the National Bell Telephone Company are hereby authorized to execute and deliver an agreement with the Western Union Telegraph Company, acting for itself and the Gold and Stock Telegraph Company, the American Speaking Telephone Company and the Harmonic Telegraph Company, by subscribing and affixing the seal of the company to the contract to be prepared by counsel in accordance with the agreement signed by the special committee of said companies, and sub-

mitted to the stockholders at this meeting, with such alterations as shall be approved by the Board of Directors."

I certify that the foregoing vote is a true copy from the records of the stockholders of the National Bell Telephone Company, and that the agreement submitted to the stockholders at said meeting, and referred to in said vote, is the agreement dated Sept. 27, 1879, by and between the Western Union Telegraph Company for itself, and the Gold and Stock Telegraph Company, American Speaking Telephone Company, and Harmonic Telegraph Company, party of the first part, and the National Bell Telephone Company, party of the second part, a copy of which contract is placed on file.

At a meeting of the directors of the National Bell Telephone Company, duly called and held at the office of said company in Boston, on the twelfth day of November, 1879, present a legal quorum, it was

"Voted: That the agreement made between the Western Union Telegraph Company, acting for itself, and the Gold and Stock Telegraph Company, the American Speaking Telephone Company and the Harmonic Telegraph Company of the one part, and the National Bell Telephone Company of the other part, of which a copy has been laid before this board and placed on file, dated the tenth day of November, 1879, and signed, sealed and delivered by the president, treasurer and clerk of this corporation, in pursuance of authority heretofore given them, is hereby declared to be in accordance with the agreement of Sept. 27, 1879, by and between the same parties, and is hereby authorized, approved, ratified and confirmed as the act and deed of this corporation."

I hereby certify that the foregoing is a true copy from the records of the directors of the National Bell Telephone Company, and that the agreement to which this certificate is attached is a true copy of the agreement in said vote referred to.

CHAS. EUSTIS HUBBARD,
Clerk of the NATIONAL BELL TELEPHONE COMPANY.

Article IV of the By-Laws of the Western Union Telegraph Company:

"The Board of Directors may designate ten of their number, who, with the president, shall constitute an Executive Committee, who shall, for the time being, have and exercise all the powers of the Board of Directors in the management of the business and affairs of the company; and have the

power to authorize the seal of the company to be affixed to all papers which may require it. The Executive Committee shall keep a record of their proceedings and report the same to the Board."

Extract from minutes Executive Committee meeting, Nov. 12, 1879:

"Whereas, heretofore, on the first day of October, the proposed contract between this company, the Gold and Stock Telegraph Company, the American Speaking Telephone Company, and the Harmonic Telegraph Company, of the first part, and the National Bell Telephone Company, of the second part, was, by vote of this committee, referred to the Law Committee with power to authorize the execution of the same in a form to be approved by said committee; and

Whereas, the form has been approved and the contract duly executed on the tenth day of November, and the seal of the company thereto attached,

Resolved, that the form of said contract, as adopted and approved by the Law Committee, and the execution thereof by the president, and the attachment of the seal by the secretary, is hereby approved, ratified and confirmed as the act of this company."

A correct copy from the minutes.

(Seal)
(Western Union) A. R. BREWER, *Secretary.*
(Tel. Co.)

At a meeting of the Board of Directors of the Gold and Stock Telegraph Company, held at the office of the company in New York, Nov. 10, 1879, present a quorum of the Board, it was

"Voted: That the contract now presented to us for our approval between the Western Union Telegraph Company for itself, and the Gold and Stock Telegraph Company, the American Speaking Telephone Company, and the Harmonic Telegraph Company, which it represents, and the National Bell Telephone Company, dated November tenth, 1879, be approved, its execution ratified, and that the seal of the company be thereto affixed."

A true copy from the record.

(Seal)
(Gold and Stock) Attest: J. D. REID, *Secretary.*
(Tel. Co.)

At a special meeting of the Board of Directors of the American Speaking Telephone Company, in the city of New York, Oct. 30, 1879, a full quorum being present, it was

"Voted: That the execution on behalf of this company of the proposed contract between the National Bell Telephone Company and the Western Union Telegraph Company, acting for itself, and this company and others, be authorized and directed to be made under the corporate seal of this company, whenever the said contract shall have been approved and executed, on the part of the Gold and Stock Telegraph Company."

A true copy.

(Seal American)
(Speaking) J. D. REID, *Secretary.*
(Telephone Co.)

Copy from the minutes of Harmonic Telegraph Co.

At the special meeting of the Directors of the Harmonic Telegraph Company, held Oct. 28, 1879, pursuant to a call.

Present: S. S. White and E. W. Andrews. The following resolution was submitted:

"Resolved, That the President of this Company is hereby authorized and directed to sign the contract on behalf of this company between the Western Union Telegraph Company for itself, and the Gold and Stock Telegraph Company, American Speaking Telephone Company, and the Harmonic Telegraph Company, party of the first part, and the National Bell Telephone Company, party of the second part, relative to an agreement made as to future royalties between said companies, and the secretary of this company shall affix the seal of this company, and attest the same.

Passed unanimously."

A true copy.

(Seal)
(Harmonic) H. H. DUNCKLEE, *Secretary.*
(Telegraph Co.)

City's Exhibit 23.

This Agreement, made this twenty-third day of December, A. D. 1881, by and between the American Bell Telephone Company, a corporation created under the laws of the State of Massachusetts, Lessor and Licensor, party of the first part, and the Chicago Telephone Company, a corporation organized under the laws of the State of Illinois, Lessee and Licensee, party of the second part;

Witnesseth:

1. Whereas the Lessor owns the Letters-Patent of the United States granted to Alexander Graham Bell, March 7th, 1876, and January 30th, 1877, numbered 174,465, 186,787, respectively, and owns or has the right to use, and may hereafter own or have the right to use sundry other inventions which are or may be embodied in electric speaking telephones, and desires to extend the use of telephones licensed by it in every manner in which the public may wish to use the same, and for that purpose to provide for the construction and use of the apparatus and lines necessary to be used in connection therewith, and whereas the Lessee desires to obtain the use of telephones under lease and license from the party of the first part to be used with the lines owned by it in the territory hereinafter described under the provisions hereinafter set forth.

Now It Is Agreed as Follows:

2. The Licensor hereby grants and licenses to the party of the second part the full and exclusive right within and for all the territory hereinafter defined, to use, and to license others to use, for all purposes for which the Licensor has or shall have the right to use them (except so far as the party of the first part to the contract of November 10, 1879, between the National Bell Telephone Company/the predecessor of the American Bell Telephone Co./of the one part and the Western Union Telegraph Company for itself and associates of the other part, may have a right under Article 14 of said contract to acquire from the Licensor telephones for transmitting telegraph messages and for use on private lines with the right to sublet the use thereof along with such private lines, and except as hereinafter provided) telephones furnished by the party of the first part, embodying any invention in or relating to telephones or their use which the party of the first part now has or shall have the right to use, either under any Let-

ters-Patent which it now owns or may hereafter acquire, or under any license or other grant or right which it has acquired or may hereafter acquire under or in virtue of the contract of November 10, 1879, or otherwise, including such full and exclusive right as aforesaid to use such telephones on exchanges as defined in said contract last named.

Such full and exclusive right of the party of the second part shall be perpetual as to all and each of the inventions or rights of use aforesaid owned or enjoyed, or to be owned or enjoyed at any time by the party of the first part, except, however, as herein otherwise specially provided, and provided and so long only as the conditions to be performed by the party of the second part under this instrument are performed by it.

3. The party of the first part hereby covenants and agrees that it will not by any assignment, grant, or other transfer of its title or interest in or under its patents or of any part thereof, give to any other party than the party of the second part hereto, any of the rights granted hereby to said second party within its territory as herein defined and while such rights of said second party exist, and will not grant to any party except said party of the second part any license to use any of its inventions in speaking telephones in conflict with the rights of the Licensee hereunder while such rights exist; and further covenants and agrees that all further assignments or grants, or transfers of interest made by the party of the first part in or under patents relating to telephones owned or controlled by it, shall be made by express terms subject to this license and agreement, and to the rights of the party of the second part hereunder, and all future grants by the party of the first part of any of said patent rights shall be subject to the rights hereby granted, and to the performance by the grantees of the obligations hereby imposed.

The party of the second part may grant and license the same right aforesaid given to it or any portion thereof to its customers and sublicensees by contracts as provided in the Eighth Article hereof.

4. The territory of the party of the second part and within and for which the right as defined in the second Article shall be exclusive is—All the territory of the counties of McHenry, Lake, Kane, Dupage, Cook, Kendall, Grundy, and Will, in the State of Illinois, and of the counties of Lake and Porter in the State of Indiana.

5. The Licensor will deliver at its general office or factory to the party of the second part, as it shall require them, elec-

tric speaking telephones made under the patents owned or acquired by the Licensor or under its right to use by license or otherwise, inventions of others, which telephones shall be of the best character, standard and pattern in use at the time of such delivery, and the party of the second part may choose the telephones to be used by it from among such standard telephones, such telephones shall bear such marks as the Licensor may from time to time determine, and shall be used under said Licensor's patent rights and other rights aforesaid during the existence of the rights hereby granted and as herein set forth and permitted. All telephones delivered to the party of the second part during the continuance of this agreement shall be deemed to be furnished hereunder, unless otherwise specially designated by the Licensor. Each of said telephones shall remain the property of the Licensor, and is hereby leased and the use of it licensed for the purposes herein declared, for the term of one year from the day when rent and royalty begins to accrue on it as provided in Article 9, but the due payment thereof to the Licensor and the due performance of the stipulations hereof during said year by the party of the second part, and those using the telephone under it shall *ipso facto* operate to renew the lease and license for another year, and so on until the determination of the rights of the said party of the second part hereunder.

The party of the second part shall by general or special exchanges, supply (so far as it is authorized so to do by the contract) all reasonable demands of the public and shall be diligent to increase the number of telephones used on its exchanges and other lines.

6. The Lessor will license to be used with such telephones the inventions in call-bells, switches, switch-boards, and other apparatus needed for such telephone lines which it can so license upon such royalties as it may from time to time establish, not greater than those fixed for others under similar circumstances, but such call-bells, switches, switch-boards and other apparatus shall be used only with telephones licensed by the Lessor, and the party of the second part agrees not to use them otherwise, nor to dispose of them to any one except those so licensed or the licensed manufacturers of the Lessor.

The party of the second part may enjoy any rights of way and similar franchises to maintain said lines which the Lessor can permit it to use, when and so long as in the judgment of the Lessor it shall not interfere with the Lessor's enjoyment thereof, and shall pay whatever may be due to third per-

sons, if anything, growing out of or in connection with such use by it—For trunk lines from the exchange offices to extra-territorial points and to telegraph offices, the Lessor may, without further compensation enjoy all rights of the Licensee to erect and maintain lines, and may use its poles and fixtures but shall pay a *pro rata* share of the cost of erecting and maintaining them.

7. The Lessee admits the validity of all patents relating to telephony and telephonic appliances now or hereafter held by the Licensor, or under which it may hold licenses exclusive in their character, and the validity of its title thereto, and will not dispute the same, nor make use or be interested in any telephones or telephonic lines or business not licensed by the Licensor or its assigns.

8. The contracts between the party of the second part and those who are to use telephones under it shall express in such form as the Lessor shall from time to time approve that the telephone is the property of the Lessor; that it is leased and licensed by it only as herein expressed; that all use of it otherwise is an injury to, and invasion of, the rights of the Licensor as owner thereof and of the Patent-rights used therein and thereby entitling it to all the remedies herein provided and to an injunction, and other legal redress in a suit by it, in its name and behalf. The party of the second part shall require every person using said telephones for communications or messages sent or to be sent over other telephone or telegraph lines to provide for payment of tolls thereon, and to make every such message subject to such stipulations, regulations, and condition respecting the liability of such lines for errors and mistakes as the Licensor may from time to time require, and for that purpose will incorporate into its subscription contracts and message blanks, such provisions and contracts to be agreed to by the subscriber and customer as the Licensor may from time to time approve, and will hold the Licensor harmless from all loss and expense consequent upon its failure so to do.

9. The party of the second part shall charge its subscribers such rental and royalty for the telephones as the Licensor may fix from time to time for this and other like uses, and also in addition a sum not exorbitant nor unusual for the use of call bells, batteries, wires, and other appliances, and for services furnished or performed and may collect both of said sums for a period not exceeding one year in advance. It will make such reports giving such information regarding the

operations of the party of the second part and lines established hereunder and the prices charged as the Licensor may from time to time request. It shall pay to the Licensor a rental and royalty at the rate per instrument of fifty (50) per cent of the telephone rental and royalty fixed as above (being a discount of fifty (50) per cent) to commence on each telephone on the first day of the second calendar month after its shipment by the Licensor, to continue until the instrument shall be put into possession of the Licensor or proved to be destroyed and to be paid in equal monthly payments in advance at the Licensor's office on the tenth day of each month up to the last day of the same month.

Until otherwise fixed the rates shall be as follows:
Battery Transmitter, each instrument, per year.....$10.00
Magneto Telephone, each instrument, per year.....$10.00

Upon each instrument unlawfully detained from the Lessor the party of the second part shall pay ten dollars per month until satisfactory proof of its destruction be furnished; shall pay five dollars for each lost or destroyed otherwise than by fire or inevitable accident, and shall pay the expense or ordinary repairs but said payments shall not confer any right to the instrument nor to its use, nor satisfy any other breach of covenant, nor impair the right of the Licensor to obtain possession of any instrument or lines.

10. In case the Licensor, its successors, or grantees shall desire to connect points within said territory, with points outside said territory they shall have the right to connect with or avail themselves of the lines and facilities of the party of the second part or its licensees, owners of exchanges or public lines making a reasonable and suitable division of the tolls and profits of such extra territorial and through business; and if or so far as said Licensee or its sublicensees shall not have or shall not furnish suitable lines and facilities then said American Bell Telephone Company may within said territory construct such lines and use such telephones as may be necessary for such purposes.

11. Said Licensee (and its sub-licensees controlling or operating exchanges or public lines) shall keep and perform all the obligations and duties incumbent on the National Bell Telephone Company or on the American Bell Telephone Company as assignee and successor in business of said National Bell Telephone Company under Article 15 of said contract of November 10, 1879, and shall enjoy all the facilities therein provided for the benefit of said National Bell Telephone Com-

pany; one-half the commissions of fifteen per cent and ten per cent therein stipulated is hereby granted to and shall be paid to and enjoyed by said Licensee and all other compensation therein provided for shall be entirely paid to and enjoyed by said Licensee. It shall keep full accounts of the messages on which such commissions are payable and shall, upon reasonable request, furnish and exhibit said accounts and the tickets and vouchers therefor to the Licensor for its information, and to enable it to make settlements with the Western Union Telegraph Company.

12. If the party of the second part shall wilfully fail to pay any sums due hereunder for thirty days after the same shall become payable or shall wilfully violate any other terms or conditions of this contract, and shall persist in any such default, violation or neglect, or fail to remedy or repair the same for ninety days after a written notice from the Licensor stating the default alleged, or shall be declared bankrupt or insolvent, the Licensor may, if it shall so elect, by a written notice to the party of the second part, or those in charge of its principal office, terminate all rights granted by the Licensor hereunder, and thereupon may by its agent, sever the circuit on which any telephone is placed, and take possession of and remove the telephone, and for that purpose may enter the premises of the party of the second part, and all persons claiming under it, and may collect from any sub-licensee or subscriber, all sums then or thereafter due to said party of the second part for the use of any instruments, circuits, and appliances or under any subscription contract, and it may, so long as it shall see fit, leave in the enjoyment and use of the telephones any subscriber or other person in actual possession, and collect from him such sums as may then and thereafter be or become due for the use of the telephone and exchange lines and appliances or under any subscription contract and for that purpose shall be entitled to and may take possession of all the lines, fixtures, apparatus, appliances, and premises, of the Licensee used for carrying on its said business, and occupy and operate the same in connection with said telephones and those of additional customers (to connect with whom it may from time to time change, extend and add to said lines and system) or it may connect such lines with an office of its own for that purpose.

If, after possession is taken of any such lines, fixtures, apparatus, appliances and premises by the Licensor in virtue of the foregoing provisions, it shall be determined either by

agreement of the parties or by final judgment or decree of a court of competent jurisdiction that the rights granted by the Licensor hereunder are lawfully terminated, the Licensor shall pay to the party of the second part, the fair value of such property to be ascertained as of the time when such possession was so taken, with interest from said day to the day of payment, such value to be ascertained in case of disagreement by arbitrators to be agreed upon by the parties, or by the judgment of a court, and upon payment or tender of said sum and interest, the title to such property shall pass to the Licensor as of the day when possession was so taken, and the Licensee shall execute suitable conveyances, if required, to vest the same accordingly.

But if, after such possession is so taken, the Licensor shall not acquire title as aforesaid, it shall return the property or premises taken, to the Licensee, and account to it for all profits and earnings of the same subject to expenses of operation, rentals of telephones and other proper charges, and shall also be allowed and paid for the cost of all additions made by it thereto as aforesaid, in good faith and in the exercise of a reasonable discretion.

If without previously taking possession of any of the lines, exchanges, and appliances as aforesaid, it shall be determined by agreement of the parties, or by a final judgment or decree of a court of competent jurisdiction, that the rights granted by the Licensor hereunder are lawfully terminated, the Licensor may acquire said property upon paying its value with interest to be ascertained as aforesaid as of the time when said right of possession accrued upon such termination, and upon payment or tender of said value and interest, the title to such property shall pass to the Licensor, and the Licensee shall execute suitable conveyances, if required, to vest the same accordingly.

The Lessor also reserves all its rights and remedies in law and in equity under the patent laws or otherwise, including the remedy by injunction, against the party of the second part, and those claiming under it for the use of any of its patented inventions or instruments not justified by a subsisting license hereunder or for the violations of any other of its rights.

All sublicenses to exchanges (if any shall be granted) shall be in accordance with, and shall in terms recognize in the party of the first part, the right to have and to exercise against such sublicenses all the rights and remedies provided for in this contract, but the default of any one sub-licensee

shall not impair the rights of other sub-licensees, nor of the party of the second part, provided the latter has and shall use reasonable diligence to prevent and redress such default and the continuance thereof.

13. The party of the second part promises that it will keep and observe all the stipulations herein contained on its part to be kept and performed. Whenever the Licensor grants to others the rights for extra territorial lines or any other rights remaining to it, the stipulations hereof relating thereto shall be binding upon and enure to the benefit of such grantees in respect to the rights so granted and the Licensor shall not be responsible for their acts or defaults in respect to the same.

14. It is understood and agreed that nothing contained in this instrument shall be construed as imposing upon either party any obligation to do anything contrary to law; and if anything herein agreed to be done by either shall be, or become contrary to law, the consequent inability and failure to perform the same shall not operate as a breach or dissolution of this contract, nor give to either party a right of action against the other.

15. The stipulations of this contract shall bind and enure to the benefit of, respectively, the several parties hereto, and their respective successors and assigns.

16. Nothing in this instrument shall affect the right of the Western Union Telegraph Company to use and lease to others to use lines for telegraph purposes, either within the territory or connecting points within, with points without the territory to be worked by telegraph instruments other than the printing instruments referred to; nor the right of the party of the first part to said contract of November 10, 1879, to acquire from the Licensor telephones for transmitting telegraph messages as therein defined, and for use on private lines with the right to sublet the use thereof along with such private lines; nor the right of the American Bell Telephone Company to connect points within the territory with points without the territory for personal conversation between the parties within and parties without said territory as defined in said contract of November 10, 1879.

17. The party of the first part further agrees to assume all the expense of defense of the party of the second part, against all actions or suits in law or equity brought against them for the alleged infringement of any patents which are now or may hereafter be issued, provided that such alleged infringement arises from the use of the telephone authorized

by the party of the first part under the patents issued to Alexander Graham Bell and to employ competent attorneys, counsel, and agents to conduct such defense, and to pay reasonable compensation to such attorneys, counsel and agents, witnesses fees, costs of court and the officers thereof, and other expenses incidental to a faithful and vigorous defense.

Said party of the first part agrees at its own expense to prosecute with due diligence such suits, in the territory of the second party (or elsewhere against similar infringers) as will in its judgment be substantially effectual to stop the use in said territory of any other telephones infringing on the patents belonging to said party of the first part. But nothing herein contained shall be construed in any event to authorize the second party to sue such infringers in the name of the first party.

EXECUTED IN DUPLICATE the day and year first above written. The following words on pages 3 and 4, viz: "Except the City of Joliet (in said County of Will) and the territory adjacent thereto and within a radius of five (5) miles from the Post Office Block in said city" and the following words on page 7, viz: "Except in the case of telephones heretofore furnished for use in said territory and to be transferred to said Lessee on which rentals are to commence on the day of the date hereof" were erased, and on page 4 the word "may" was substituted for the word "shall" and on page 11 the words "has and" were interlined before execution.

THE AMERICAN BELL TELEPHONE COMPANY,
By (sig'd) THEO N. VAIL,
Its General Manager.

(Seal) Approved:

(Sig'd) CHARLES B. BOWDITCH,
Member of Executive Committee.

CHICAGO TELEPHONE COMPANY,
By (sig'd) ANSON STAGER,
President.

(Seal)

Attest:

(Sig'd) R. C. WETMORE,
Secretary.

CITY'S EXHIBIT 24.

THIS AGREEMENT, made and entered into this First day of July 1891, by and between the AMERICAN TELEPHONE AND TELEGRAPH COMPANY, a corporation duly organized and existing under and by virtue of the laws of the State of New York, hereinafter referred to as the AMERICAN COMPANY, party of the first part, and the CHICAGO TELEPHONE COMPANY, a corporation duly organized and existing under and by virtue of the laws of the State of Illinois, hereinafter referred to as the CHICAGO COMPANY, party of the second part, both of said parties holding licenses from AMERICAN BELL TELEPHONE COMPANY.

WITNESSETH:

WHEREAS:—The parties hereto desire temporarily to modify some of the provisions of said licenses and to provide more explicitly for certain details of operation;

NOW THEREFORE, In consideration of the premises and of the sum of One Dollar paid by each of said parties to the other, the receipt of which is hereby acknowledged, the parties hereto agree as follows:

First:—That the CHICAGO COMPANY shall build, equip and maintain special terminal loops of such reasonable and suitable construction as shall be approved by the AMERICAN COMPANY, from its several exchange offices to such points within the districts of the respective exchanges as the AMERICAN COMPANY may, from time to time request, and shall inspect and maintain the instruments connected therewith as directed by the AMERICAN COMPANY, for which the AMERICAN COMPANY shall pay the CHICAGO COMPANY in equal monthly installments, for one year, and thereafter until termination by thirty days notice in writing, at the annual rates hereinafter specified for the several exchanges, viz:—

1. For each loop built in the Exchange District of the City of Chicago, to a point within a radius of one-half mile from the respective Exchange Office Thirty Six ($36.00) Dollars; for each loop to a point beyond a radius of one-half mile and within a radius of three-fourths of a mile, Fifty One ($51.00) Dollars; for each loop to a point beyond a radius of three-fourths of a mile and within a radius of one mile, Sixty Three ($63.00) Dollars; for each loop to a point beyond a radius of one mile and within a radius of one and one-fourth

miles, Seventy Five ($75.00) Dollars; for each loop to a point beyond a radius of one and one-fourth miles and within a radius of one and one-half miles, Eighty Seven ($87.00) Dollars; for each loop to a point beyond a radius of one and one-half miles and within a radius of one and three-fourths miles, Ninety Nine ($99.00) Dollars; for each loop to a point beyond a radius of one and three-fourths miles, and within a radium of two miles, One Hundred and Eleven ($111.00) Dollars, and at the rate of Nine ($9.00) Dollars for each one-fourth of a mile or fraction thereof increase of radius.

2. For each loop built in any other Exchange District to a point within a radius of one-half mile from the respective Exchange Office, Twenty Four ($24.00) Dollars, and at the rate of Nine ($9.00) Dollars for each one-fourth mile, or fraction thereof, increase of radius.

3. For inspection and maintenance of each set of instruments and batteries (which instruments and batteries shall be furnished by the AMERICAN COMPANY) Twenty Four ($24.00) Dollars.

PROVIDED, that the AMERICAN COMPANY may inspect and maintain any, or all, of said instruments and batteries, whenever and so long as it may desire so to do, by giving written notice thereof to the CHICAGO COMPANY and, Provided, that during such time as the AMERICAN COMPANY shall so inspect and maintain such instruments and batteries, payments therefor by it to the CHICAGO COMPANY shall cease.

Second:—That the CHICAGO COMPANY shall furnish such labor and service, including switching, reports and collections, as the AMERICAN COMPANY may deem necessary for the proper management and operation of such of its lines and loops as may be located within the territory of the CHICAGO COMPANY, for which the AMERICAN COMPANY shall pay the CHICAGO COMPANY as follows:—

1. For special operating service in the several exchanges the sums provided in "Schedule A", which schedule shall be signed by the General Managers of the respective parties, attached to and thereupon shall become a part of this contract. Said Schedule A, may be changed or modified, at intervals of not less than six months, (thirty days after notice in writing, given by either party to the other), by mutual agreement of said General Managers, which agreemeent shall be reduced to

writing, signed by said General Managers, attached to and thereupon shall become a part of this contract with the same force and effect as if done at the time of its execution; provided, that the AMERICAN COMPANY may, whenever and so long as it desires, in whole or in part, perform such service, and payments to the CHICAGO COMPANY shall cease during the time and for so much of such service as may be performed by the AMERICAN COMPANY.

2. A commission of fifteen (15%) per cent on the cash receipts of the AMERICAN COMPANY from business originating upon the lines of the CHICAGO COMPANY, not exceeding ten (10¢) cents for any single connection; but it shall not apply on any business originating on the special terminal loops provided for in Article First; nor on business passing between points wholly within the territory of the CHICAGO COMPANY, as provided in Article Third.

Third:—That the CHICAGO COMPANY may use the lines of the AMERICAN COMPANY for the transmission of messages between points wholly within the territory of the CHICAGO COMPANY, when and so far as, in the judgment of the AMERICAN COMPANY, such use shall not interfere with its own use of said lines, and shall pay therefor to the AMERICAN COMPANY one-half of its gross receipts for such use; Provided, however, that the charges for such service shall not be less than the rates fixed by the AMERICAN COMPANY for similar service.

Fourth:—That the CHICAGO COMPANY shall furnish such other labor and materials as the AMERICAN COMPANY may from time to time request for the care and maintenance of such of its property as may be located within the territory of the CHICAGO COMPANY, for which the AMERICAN COMPANY shall pay the CHICAGO COMPANY the actual cost of labor and materials so furnished, plus ten (10%) per cent.

Fifth:—That to promote the establishment of Public Stations furnished with equipment and attendance suitable for "Long Distance" business, the AMERICAN COMPANY agrees that it will, in addition to the commission provided for in Article Second, Section 2, contribute an amount equal to fifteen (15%) per cent. of its cash receipts from business originating at such Public Stations of the CHICAGO COMPANY, not exceeding ten (10¢) cents for any single connection; and the CHICAGO COMPANY agrees to furnish a sufficient number of such stations to meet the reasonable needs of the public for such facilities. A schedule of such stations (marked "Schedule B"), shall be attached to this contract and changes

may be made therein; from time to time, by written agreement between the General Managers of the respective parties, and payments shall be made only on business originating at stations so specified.

Sixth:—That each party shall render to the other such reports and other data as may be requisite for the adjustment of all accounts between said parties; such reports and data shall be rendered as promptly as possible and not later than the twentieth of each month for the month last preceding.

Seventh:—That all details of operation connected with the business of the AMERICAN COMPANY shall be under its supervision and control.

Eighth:—That this agreement shall continue for one year from the date first above written and thereafter until the expiration of thirty days after notice in writing has been given by either party to the other of intention to terminate the same; and all its conditions and provisions shall be binding upon the successors and assigns of the respective parties.

Ninth:—That it is expressly understood and agreed between the parties hereto, that nothing herein contained shall be construed as requiring either party to do or permit any act in violation of any of its agreements with THE AMERICAN BELL TELEPHONE COMPANY; and that upon notice from THE AMERICAN BELL TELEPHONE COMPANY of such violation, so much of this contract as may be in violation of such agreements, shall thereupon become void.

IN WITNESS WHEREOF, On the day and year first above written the parties hereto have caused these presents to be executed in duplicate and their corporate seals to be affixed thereto by their respective officers thereunto duly authorized.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY,

By EDWD. J. HALL, JR.,
Vice President.

Attest

MELVILLE EGLESTON,
Secretary.

THE CHICAGO TELEPHONE CO.,

by HENRY B. STONE,
President.

Attest

R. C. WETMORE, *Secy.*

"SCHEDULE A."

IN ACCORDANCE WITH THE PROVISIONS of Article Second, Section 2, of the contract between the AMERICAN TELEPHONE AND TELEGRAPH COMPANY and the CHICAGO TELEPHONE COMPANY, dated 1 July 1891 the undersigned General Managers of the aforesaid Companies do hereby agree that for the special operating service provided for in said contract, the AMERICAN COMPANY shall pay to the CHICAGO COMPANY in full for the labor and service provided for in said Article Second, Section 2, the sum of Thirty ($30.00) Dollars per month so long as the said labor and service may be rendered by the CHICAGO COMPANY, or until the arrangement herein made may be changed by virtue of the provisions of said contract; and this agreement is hereby designated as "Schedule A", referred to in said contract.

EDW. J. HALL, JR.,
General Manager,
American Telephone and Telegraph Company.
THE CHICAGO TELEPHONE CO.,
by HENRY B. STONE,
President.

Attest
R. C. WETMORE, *Secy.*

CITY'S EXHIBIT 25.

Arbitrary Terminal Commission

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

Executive Office

18 Cortland Street
New York, January 7th, 1896.
In reply to yours Nov. 11, 95.
136424.

Chicago Telephone Company,
Chicago, Ills., Mr. A. S. Hibbard, General Manager.
Dear Sir:

Referring to the matter of arranging for the payment to your Company of an arbitrary terminal commission for the purpose of avoiding the complication and expense incident to accounting for the terminal commission on each specific mes-

sage, and confirming your conversation upon this subject, I beg to suggest that until further notice we pay your Company an arbitrary terminal commission of twelve cents per connection upon all long distance connections originating at the subscribers and public stations of your Company; this payment, however, not to apply to free business, and to be subject to modification from time to time as an examination of the account discloses that this payment should be increased or diminished.

Yours truly,

EDW. P. MEANY,
Assistant General Manager.

CITY'S EXHIBIT 26.

Subject: Arbitrary amount as commission on Long Distance business.

CHICAGO TELEPHONE CO.

Chicago, Ill., Jan. 15, 1896.

American Telephone & Telegraph Company,
Edward P. Meany, Esq., Assistant General Manager,
18 Cortland Street, New York.

Dear Sir:

In reply to yours of January 7th, I have to state that commencing with January 1st, and until further notice, we will, as recommended, accept an arbitrary terminal commission of twelve cents per connection upon all Long Distance messages originating at the subscribers and public telephones operated by our Company. This payment, however, is not to apply to free business, and is to be subject to modification from time to time as examination of the accounts discloses that the amount should be increased or diminished.

Yours truly,

A. S. HIBBARD,
General Manager.

CITY'S EXHIBIT 27.

Simplifying Accounts #412.

AMERICAN TELEPHONE & TELEGRAPH CO.

New York, June 14, 1899.

Chicago Telephone Company,
Mr. G. W. Hutchinson, Auditor.
Chicago, Ill.

Dear Sir:

In order to further simplify our computations for commissions, I beg to suggest that in lieu of the commission on net cash connections that we allow a flat commission on the gross connections, which based on six months business for your company gives an average of 12¢ per connection.

I attach hereto a statement showing our calculations, and would suggest that this change take effect, commencing with the month of June. Please acknowledge, and oblige.

Yours truly,

(Signed) E. W. MOISTER,
Acting Auditor.

CITY'S EXHIBIT 27-A.

CHICAGO TELEPHONE COMPANY

	Gross Connections	Originating Commission	Loop Commission	Total Commission	Average per Connection
July	4472	512.04	10.08	522.12	.1168
August	4286	499.34	15.48	514.82	.1201
September	4356	506.40	13.32	519.72	.1193
October	4831	569.52	19.56	589.08	.1219
November	4680	547.20	15.00	562.20	.1201
December	4858	563.76	19.92	583.68	.1201
Total	27483	$3198.26	$93.36	$3291.62	$.1198

CITY'S EXHIBIT 28.

Simplifying accounts. #412

AMERICAN TELEPHONE AND TELEGRAPH CO.

New York, June 21st, 1899.
In reply to yours 237198.

Chicago Telephone Company,
Mr. G. W. Hutchinson, Auditor,
Chicago, Ill.

Dear Sir:

Replying to yours of the 19th inst., with reference to simplifying accounts, I beg to say that it is understood that this flat commission is subject to revision upon request by either Company. As for the simplifying of accounts, this change probably affects us more than you for the reason that we have done away with the need of furnishing a record of "free" messages paid by "free" coupons, and this necessititates treating gross connections instead of net connections. I did not mention this in my letter for the reason that it affects us only, and I thought that computation on gross connections alone would appeal to you.

I would, therefore, be obliged if you can see your way clear to make this change.

Yours truly,

(Signed) E. W. MOISTER,
Acting Auditor.

CITY'S EXHIBIT 29.

AMERICAN TELEPHONE & TELEGRAPH COMPANY
15 Dey Street.
New York, May 11th, 1909.

Chicago Telephone Company,
B. E. Sunney, Esq., President,
Chicago, Illinois.

Dear Sir:

In the agreement between this Company and your Company, dated July 1st, 1891, in which provision is made for certain details of operation of the lines of the respective par-

ties, it is stipulated that a commission of fifteen per cent. (15%) on the cash receipts of this Company from business originating upon the lines of your Company as defined in such agreement, not exceeding ten cents (10¢) for any single connection, shall be allowed your Company instead of the commission stated in the license contract issued to your Company by The American Bell Telephone Company.

This Company has now decided to increase and does hereby increase such commission from fifteen per cent. (15%) on the cash receipts of this company from such business, not exceeding ten cents (10¢) for any single connection, to a commission of fifteen per cent. (15%) on such cash receipts, not exceeding twenty cents (20¢) for any single connection; but this increase shall not apply to receipts from communications over the lines of this Company when the "L Operator" of this Company, as defined by its Operating Rules, is in charge of such communications.

This increase shall apply to business done on and after May 1, 1909, and until further notice.

Yours very truly,

EDW. J. HALL,
Vice President.

Copy sent to
MR. A. S. HIBBARD, *Gen. Mgr.*
MR. B. S. GARVEY, *Auditor.*

CITY'S EXHIBIT 30.

OFFICE OF PRESIDENT, CHICAGO.

May 13th, 1909.

Mr. E. J. Hall, Vice President,
American Tel. & Tel. Company,
New York, N. Y.

My dear Sir:

I have yours of May 11th, increasing the commission from not exceeding 10 cents for any single connection to not exceeding 20 cents for any single connection,—the increase not to apply to receipts from communication over the lines of the A. T. & T. Company when the "L Operator" of the latter company, as defined by the operating rules, is in charge of such communication; the increase to apply on business after May 1st, 1909, and until further notice.

Yours truly,

B. E. SUNNY.

CITY'S EXHIBIT 31.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

New York, February 14th, 1911.

Chicago Telephone Company,
203 Washington Street,
Chicago, Ill.

Gentlemen:

You have in the City of Chicago been furnishing to us for our exclusive use in connection with long distance messages, certain trunk lines extending from your operating switch board to various branch offices of your Company located in different parts of the City. These have been associated with special B boards and B board operating appliances. The cost of these trunk lines has been covered by annual rental.

It is now proposed that these facilities shall continue to be furnished by you as they may be required from time to time by us for our long distance business and that for the greater economy of both Companies they may be used in common for the toll business of your Company as well as our long distance messages. For that privilege we have now to propose that instead of being covered by annual rental for certain specific trunk lines, etc., the cost be figured upon a message basis. Your costs during 1910 have been shown to be about five (.05) cents for each outgoing long distance paid call covering annual charges on these trunk lines.

We have now to propose that this amount of five (5) cents for each outgoing call be the basis upon which this Company will pay you for these special facilities, such payments to be in force from January 1st, 1911, and continue under further agreement between us.

Yours very truly,

H. B. THAYER,
Vice President.

CITY'S EXHIBIT 31-A.

ILLINOIS BELL TELEPHONE COMPANY

DATE AND BOOK COST OF TOLL PLANT IN CHICAGO

PURCHASED FROM A. T. & T. COMPANY

January 1, 1911	$320,030.08
September 1, 1913	256,853.58

CITY'S EXHIBIT 31-B.

ILLINOIS BELL TELEPHONE COMPANY

Date

To

I hereby certify that the following is a true copy of resolution duly adopted by the Board of Directors of the Illinois Bell Telephone Company at a regular meeting duly called and held on February 21, 1911, at which meeting a quorum was present.

A. R. BONE,
Secretary.

The President submitted, with favorable recommendation, a proposition by the American Telephone and Telegraph Company outlining a plan of settlement of question between that Company and the Chicago Telephone Company, with regard to the plant used for Long Distance traffic in Chicago. It proposed that the Chicago Company buy the telephone plant constructed by the American Company within the City Limits, for the sum of $229,362.20, and that the plant so purchased, together with the plant now owned by the Chicago Company and in use for Long Distance message service—all valued in the sum of $444,473.45—be continued in such service, and that the Chicago Company's portion of the revenue from such service shall be paid in monthly installments of $6,865.17, being 18.5% per annum on the above value. On a motion duly carried the President was authorized to accept the proposition.

CITY'S EXHIBIT 31-C.

STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

FILED Mar. 11, 1922 Chicago Office

Case No. 11894

Commission's Order of December 22, 1921
Section 1
Exhibit D
Item 5
Filed 3-11-1922.

Subject: Long Line Plant in the City of Chicago.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY (MR)

February 14, 1911.

Chicago Telephone Company,
B. E. Sunny, Esq., President,
203 Washington Street,
Chicago, Illinois.

Dear Sir:

This letter is written for the purpose of confirming the arrangements made at the recent conference in New York for the settlement of outstanding differences between this Company and your Company in regard to the plant in Chicago used for long line purposes.

Should you find the following statement to be in accord with your understanding of the arrangements concluded, will you kindly so advise me, and we will consider this letter and your reply as a sufficient record of these arrangements.

It was recognized by the representatives of both Companies at the conference in question that a definite understanding between the two Companies concerning the plant which has been built in Chicago at various times during the past twenty years or more to afford to the patrons of the Chicago Company service over the long line plant of the American Company should be concluded without further delay. The following is a statement of the conclusions reached:—

At the time that the first lines which form a part of this plant were constructed, the Chicago Company was not in a position to make the necessary investment to supply the facilities which the American Company demanded and had

a right to demand under the license contracts. Accordingly, the lines were paid for by the American Company. Since that time portions of the present lone line plant in the city have been built by the American Company, portions by the Chicago Company, for which it has been reimbursed by the American Company, and other portions by the Chicago Company at its own expense, for which no settlement has been made. The result is that there is an open account between the two companies which requires an adjustment.

It is thought that the interests of all concerned will be best served by an arrangement which leaves in the Chicago Telephone Company the ownership of all of the plant, consisting of poles, wires, conduits, cables and fixtures used in the long line business within the present city limits, and as the Chicago Company is now willing to make the necessary investment to accomplish this purpose, it is agreed that all of this plant located upon along or under the streets of the City of Chicago shall be turned over to the Chicago Company and an adjustment made. Accordingly, the Chicago Company will purchase from the American Company all of this plant, as per Schedule "A" hereto attached, which has been built by or at the expense of the American Company, for the sum of $229,362.20, which has been determined to be a fair valuation as of January 1st, 1911, and described in Schedule "A" hereto attached. Under existing contract, the Chicago Company will be entitled to a reasonable and suitable division of the tolls and profits derived from business passing over its plant to or from points on the system of the American Company. In view of the fact that it is impossible to accurately determine this division on a mileage basis, and of the expense of accounting and other difficulties involved in such a division, *it is agreed that the following arrangement shall be adopted* IN LIEU THEREOF:

The entire plant owned by the Chicago Company and devoted to and used in connection with the long lines business after payment of a sum of $229,362.20, will be $444,473.45, which has been determined to be a fair valuation of the plant as of January 1st, 1911, and as described in Schedule "B" hereto attached. Additions to the existing plant will be made from time to time by the Chicago Telephone Company as required for a proper development of the business, and the cost added to the plant investment.

The American Company will pay the Chicago Company monthly for the use of this plant. Beginning January 1st,

1911, this payment shall be $6,852.29 per month, which is at the rate of 18.5% per annum on the above stated sum of $444,473.45. Whenever important changes (either additions or deductions) occur in the long line plant in the city, the monthly sum to be paid by the American Company shall be, at the request of either party, recalculated on a basis similar to that by which the above 18.5% is computed, which basis is briefly as follows:

The depreciation percentages currently used as standard (straight line basis) by the Engineering Department of the American Company on different classes of plant, plus the percentages of repair costs to different classes of plant, as ascertained from Chicago experience, plus the average rate of taxes on plant in Chicago, plus 1% for administration expense, plus 10% for a fair return on the investment.

The depreciation percentages are understood to cover reconstruction of the plant that becomes necessary for any cause, but as reconstruction occurs the investment shall be decreased by the cost of old plant displaced and increased by the cost of new plant that takes its place.

All of the plant in question is to be maintained in good and satisfactory condition and repair by the Chicago Company, and the expenses incident to such maintenance, including taxes, general expenses or other usual current charges, are to be borne by that Company.

It is understood that this arrangement applies to and affects only the main line plant used for long line purposes, and located upon, along and under the streets of the City of Chicago; to be operated in accordance with the terms of existing agreements between our respective Companies, the same to remain in full force except as expressly modified by the arrangement outlined above.

Very truly yours,

H. B. THAYER,
Vice President.

Enclosure —B83703—

SCHEDULE A

SUMMARY OF PAYMENTS TO BE MADE TO AMERICAN TEL. & TEL. CO. DECEMBER 31, 1910

For Details See Statement No.	Kind and Amount of Plant	Estimated Value as of Dec. 31, 1910
	Pole Line, including guying	$ 17,163.46
4	Crossarms,	7,376.55
	Open Wire,	51,112.40
7	376,637 Duct feet, underground conduit,	79,859.92
9	82,694 Feet, main underground cable,	56,590.35
10	Loading of main underground cables,	12,506.04
5	33,576 Feet, aerial cable, including laterals,	4,753.48
	Total,	$229,362.20

SCHEDULE B

SUMMARY OF PLANT IN CHICAGO USED IN CONNECTION WITH LINES OF AMERICAN TEL. & TEL. CO., JAN. 1, 1911.

For Detail See Statement No.	Kind and Amount of Plant.	Estimated Value Jan. 1, 1911
	Pole Line,	$ 17,163.46
4	Crossarms,	7,376.55
	Open Wire,	51,112.40
5	33,576 Ft. aerial cable, including laterals, previously paid for by A. T. & T. Co.,	4,753.48
6	Value of other aerial cable circuits,	1,903.62
7	376,637 Duct Ft. U. G. conduit previously paid for by American Tel. & Tel. Co.,	
8	323,211 Duct Ft. U. G. conduit assigned to American Tel. & Tel. Co.'s use, @ $0.31 per foot)	216,952.88
9	82,694 Ft. main U. G. cable previously paid for by American Tel. & Tel. Co.,	67,471.11
10	Loading of main U. G. cable previously paid for by American Tel. & Tel. Co.,	15,569.81
6	Value of North Shore (Chicago-Milwaukee) circuits (60 prs. #14, Franklin St. to North City Limits,)	41,253.75
6	Value of miscellaneous U. G. cable circuits, including ducts occupied,	
	1. Cable,	13,631.73
	2. Pro-rata share of duct occupied,	7,284.65
	Total,	$444,473.45

March 6, 1911.

Mr. H. B. Thayer, Vice President,
American Telephone & Telegraph Company,
15 Dey Street, New York.

Dear Sir:

This Company accepts the proposition contained in your letter of February 14th and authorized by the Executive Committee on March 1st, covering the purchase by this Company of plant in the City of Chicago for the sum of $229,362.20, and a voucher for that sum, less the amount covered by the credit of February 17th of $63,251.80, will be sent you forthwith.

Yours truly,
B. E. SUNNY.

CHICAGO TELEPHONE COMPANY
WISCONSIN TELEPHONE COMPANY
THE CLEVELAND TELEPHONE COMPANY
MICHIGAN STATE TELEPHONE COMPANY

Chicago, May 20, 1915.
1821 Z

Mr. B. S. Garvey,
General Auditor.

Dear Sir:

In connection with the outside plant in the city of Chicago which is used for long lines business, Mr. Thayer's letter to Mr. Sunny, dated February 14, 1911, outlines the method of procedure to be followed in regard to the charges for the use of this plant. As certain important changes in the plant have been made since that letter, it was necessary to refigure the charges and, in order that the change in billing may vary automatically with the change in plant, it has been arranged to bill the American company a certain percentage of the book value of the plant.

An appraisal was made of this plant, as of April 1, 1914, and figures listed later in this letter were arrived at. In arriving at the annual rental to be charged for this plant, the agreement states that the rate of depreciation should be the standard straight line depreciation used by the American Company's engineers, and the maintenance should be the rate as shown by the Chicago Company's experience for the class of plant in question. Administration should be 1%; interest 10%; and taxes, the rate paid by the Chicago Com-

pany on this class of plant. In connection with taxes, Mr. Sunny agreed that the 10% interest would care for the city tax of 3.1%, and a rate of 1.5% was agreed upon. The depreciation and maintenance rates agreed upon are as follows:

	Depreciation	Maintenance
Pole Lines	8.3	2.0
Cross Arms	8.3	2.0
Aerial Wire	2.5	4.0
" Cable	5.8	5.5
Underground Conduit	2.0	1.1
" Cable	2.8	1.9
Loading " "	2.8	1.9
Right of Way	6.3	0

The detail of arriving at those percentages is shown in my letter to Mr. Miller, dated March 10, 1915, and statement attached to that letter, a copy of which is attached.

As part of the plant purchased from the American Telephone & Telegraph Company in December, 1910, was purchased at depreciated value, it evidently is not fair to charge the American Company 10% on the book value of the plant. Similarly, as we have from time to time replaced the depreciated plant with new plant, it is equitable that we should get a return greater than 10% on the depreciated value.

In order to simplify the figuring and to avoid the necessity of keeping two or three sets of books, it was figured—as outlined in detail in the attached statement—that the depreciated plant would be entirely displaced by 1932, and there is a point between 1910 and 1932 at which the interest which the Chicago Company has received, based on the depreciated value, is as much less than the amount which it should have received, based on the actual book value of plant in service, as the interest received on book value of the total depreciated plant after that date exceeds the value of the depreciated plant. This point will occur February 1, 1919 unless there are important deductions from the plant which we purchased from the American Telephone & Telegraph Company at a depreciated value, in which case it will be necessary to recalculate the date.

The book value figures agreed upon were as follows:

Pole Lines	56305.04
Cross Arms	13901.62
Aerial Wire	75494.62
" Cable	9350.03
Underground Cable	125500.69
Loading " "	16169.81
Highlands " and Loading	131955.97
Right of Way	1695.00
(This was the amount of right of way which the American Telephone & Telegraph Company billed us when we took over the inside plant in Chicago.)	
Underground Conduit	215502.99
(The underground conduit is here figured on a basis of 31c per duct foot, as this was the price at which the Chicago Company bought it of the American Company.)	
Total	$645955.77

Will you please arrange to set these figures up for the long lines plant in Chicago, as of April 1, 1914, and keep a separate record of this plant, handling the additions and removals in the same manner as we handle any other exchange plant. Will you also arrange to bill the American Company from January 1, 1915, until further notice at the following rates on the average plant in service during the month for each of the following classes:

Pole Lines, including Cross Arms	22.8%	per year;
Aerial Wire	19	" "
" Cable	23.8	" "
Underground Conduit	15.6	" "
" Cable, including Loading	17.2	" "
Right of way	18.8	" "

The detailed method of arriving at these rates is shown in the attached correspondence. On this bill, will you arrange to allow the American Company a credit on the interest not earned, amounting to the interest on the difference between the full book value and the depreciated value of this certain short-lived plant. This amounts to $6788.46 per year. This credit should be allowed until February 1, 1919, unless you are advised to the contrary. A suggested wording of this item is as follows:

> "Monthly credit for interest to be allowed each month until January, 1919, inclusive, on difference betweeen price paid by Chicago Telephone Company and full reproduction value used in the preceding calculations of property included above which was purchased from the

American Telephone & Telegraph Company at its depreciated value."

In addition to this, will you render the American Company one bill for the Highlands Cable which was installed under Estimate Cg-13364, on which the work was started November 11, 1913 and cut into service March 8, 1914, to cover interest on the amount spent each month from the date the work was started until the plant was put into service, and an annual charge against this cable at the rate of 17.2% per year from the date it was put into service until December 31, 1914. From that date it will be handled as underground cable in the manner mentioned above.

Will you also let me have a statement showing the changes in outside plant used by the long lines department by months from April 1, 1914 to January 1, 1915.

For your information, I attach a copy of my letter of March 10 to Mr. Miller, together with the attachments mentioned in this letter and a copy of his reply, dated May 30, 1915 accepting the method of figuring.

Yours truly,

(Signed) H. F. HILL,
Vice President.

2 Encs.

March 10, 1915.
Z

American Telephone & Telegraph Company,
Mr. T. G. Miller, Division Plant Superintendent,
212 W. Washington Street, Chicago.

Dear Sir:

Mr. Thayer's letter to Mr. Sunny, dated February 14, 1911, outlines the method of procedure to be followed in regard to the charges for the outside plant in Chicago used in the operation of the Long Lines. This letter states that whenever important changes, either additions or deductions, have been made in the plant, the monthly sum to be paid by the American Telephone & Telegraph Company should be recalculated according to the basis outlined in that letter. Important additions and changes have been made recently in the plant so reserved and it is now necessary to recalculate the charges which should be paid.

In accordance with a ruling of the Interstate Commerce Commission, we have put this plant on our books at its book value and, to simplify the accounting it is desirable to express the annual charge as a percentage of the book value of the

plant which will be applied against the book value of each class of plant in arriving at the bill.

If 10% interest was applied against the book value of the plant, it is obvious that on a certain short-lived plant where we paid you only the depreciated value we would be getting interest on money which we had not invested. However, when the plant which we purchased from you at its depreciated value has been entirely replaced with new plant, we will have invested the book value of the plant and we should then get a return on that amount. In order to simplify the matter so that the interest would not have to be calculated each year, we have assumed that a certain date between January 1911, and the date when the plant will have been entirely renewed can be determined upon when it will be equitable to change from interest on the depreciated value to interest on the book value.

The remaining life for the short-lived plant outlined in the estimate covering the purchase of the plant in 1911 when this agreement was made was assumed to be as follows:

Pole Lines	6	years;
Cross Arms	10	"
Aerial Wire	10	"
The part of the Aerial Cable Purchase..	4	"

The interest to be paid us would vary according to the attached curve and about the same result would be obtained if, instead of paying us the varying interests as shown on this curve, you pay us interest at 10% on the depreciated value until February 1, 1919, and at that time commence to pay us interest on the book value. In order to simplify the matter, we will bill you 10% interest on the book value and allow you a credit of $6788.46 per year for interest not earned until February 1, 1919.

This will be accurate, assuming that there are no important deductions in the plant which we purchased from you at the depreciated value, that is, pole lines, cross arms, aerial wire, and a portion of the aerial cable. Should there, however, be important deductions in any of these items, these figures will not be correct and the amount of the credit and the date at which the adjustment should be made should be recalculated. A table is attached showing how the interest was computed by which the $6788.46 credit was arrived at.

We have agreed with you on the annual charges as shown

in the attached table and the explanation which is also attached shows how these were arrived at.

There is also an item of right-of-way which was not included in the 1911 figures, but for which your Auditor rendered us a bill of $1695.00, and which we paid you in 1914. We have included this in the plant on which we should get a return.

The total annual charges, as shown on the statement attached, will be applied against the book value shown in the various construction accounts; that is, 22.8% for pole lines will be applied against the 1-C account and the result will be the annual charge which you should pay for poles and cross arms. In a similar manner other charges will be computed.

Will you please let me know if this method of figuring will be satisfactory to your company and if you will accept the annual charges as shown in the attached statement from January 1st, 1915.

We will render one bill for the Highland Cable to cover interest on amount spent each month from date work was started until the plant was put into service and annual charge at rate of 17.2% from that date to December 31st, 1914.

Yours truly,

.....

4 Encs. *Vice President.*

ANNUAL CHARGES TO BE APPLIED ON AMERICAN TELEPHONE AND TELEGRAPH COMPANY OUTSIDE PLANT IN CHICAGO

	Interest	Taxes	Administration	Depreciation	Maintenance	Total Annual Charges	Book Value	Annual Rents
Pole Lines	10	1.5	1	8.3	2.0	22.8	56385.04)	16025.36
Cross Arms	10	1.5	1	8.3	2.0	22.8	13901.62)	
Aerial Wire	10	1.5	1	2.5	4.0	19.0	75494.62	14343.98
" Cable	10	1.5	1	5.8	5.5	23.8	9350.03	2225.31
Underground Conduit	10	1.5	1	2.0	1.1	15.6	215502.99	33618.47
" Cable	10	1.5	1	2.8	1.9	17.2	125500.69)	24367.33
Loading " "	10	1.5	1	2.8	1.9	17.2	16169.81)	
Highlands " and Loading						17.2	131955.97	22696.43
Right-of-Way	10	1.5	1	6.3	..	18.8	1695.00	318.66
					Total		645955.77	113595.54

Book Value of Poles	as of January 1, 1911	$48890.65
" " " Cross Arms	" " " " "	13644.20
" " " Aerial Wire	" " " " "	75494.62
" " " " Cable (purchased from A. T. & T. Co.)	" " " " "	10261.02
Depreciated " " Poles	as of January 1, 1911	17163.46
" " " Cross Arms	" " " " "	7376.55
" " " Aerial Wire	" " " " "	51112.40
" " " " Cable	" " " " "	4753.48

ADDITIONAL INTEREST TO BE ADDED EACH YEAR DUE TO INVESTMENT OF NEW MONEY.

Year	Pole Lines	Cross Arms	Aerial Wire	Aerial Cable	Total	Total Interest at 10% on Plant Purchased in 1911
1	132.20	15.67	60.96	34.42	243.25	44690.60
2	396.59	47.01	182.87	103.27	729.74	45177.09
3	660.98	78.35	304.78	172.11	1216.22	45663.57
4	925.37	109.69	426.69	240.95	1702.70	46150.05
5	1189.76	141.03	548.60	309.79	2189.18	46636.53
6	1454.15	172.37	670.51	378.63	2675.66	47123.01
7	7118.54	203.71	792.42	447.47	3162.14	47609.49
8	1982.93	235.05	914.33	516.31	3648.62	48095.97
9	2247.32	266.39	1036.24	550.75	4100.70	48548.05
10	2511.71	297.73	1158.15	550.75	4518.34	48965.69
11	2776.10	329.07	1280.06	550.75	4935.98	49383.33
12	3040.49	360.41	1401.97	550.75	5353.62	49800.97
13	3172.70	391.75	1523.88	550.75	5639.08	50086.43
14	3172.70	423.09	1645.79	550.75	5792.33	50239.68
15	3172.70	454.43	1767.70	550.75	5945.58	50392.93
16	3172.70	485.77	1889.61	550.75	6098.83	50546.18
17	3172.70	517.11	2011.52	550.75	6252.08	50699.43
18	3172.70	548.45	2133.43	550.75	6405.33	50852.68
19	3172.70	579.79	2255.34	550.75	6558.58	51005.93
20	3172.70	611.13	2377.25	550.75	6711.83	51159.18
21	3172.70	626.80	2438.21	550.75	6788.46	51235.81

COPY.

FACILITIES RENTED—Long Lines Plant in City of Chicago.
AMERICAN TELEPHONE & TELEGRAPH COMPANY

Chicago, May 13, 1915.

Chicago Telephone Company,
Mr. H. F. Hill, Vice Pres.,
Chicago, Ill.

Dear Sir:

I have been advised by Mr. Stevenson that the arrangement for making payments to the Chicago Telephone Company for plant furnished for the use of the American Telephone & Telegraph Company in the city of Chicago, as outlined in your letter of March 10, has been approved. The figures included in your yetter of March 10 were correct as of April 1, 1914.

As it is understood that the same arrangements for arriving at the rental charges as are now in effect for the inside plant will be placed in effect for the outside plant, we shall be pleased to receive a statement showing the changes which have been made monthly since April 1, 1914, and in the future, monthly statements showing changes, if any, in plant values and rental charges.

Yours truly,

(Signed) T. G. MILLER,
Division Superintendent of Plant.

JJP—CM

STATEMENT EXPLAINING ANNUAL CHARGES TO BE APPLIED ON THE LONG LINES OUTSIDE PLANT IN CHICAGO

This Long Lines Plant will be classified as pole lines, aerial wire, aerial cable, underground conduit, underground cable, and right-of-way.

Included with pole lines are the cross arms. An inventory taken in 1914 showed that the book value of the pole lines used for Long Lines business was $56,385.04; while cross arm amounted to $13,901.62. The charges against this are depreciation at 6.3%, which is the American Telephone & Telegraph Company's standard straight line depreciation rate, plus a 2% allowance for extraordinary casualties, as no allowance for this is included in the 6.3% rate. The main-

tenance charge is 2% which is based on the Chicago experience for this class of plant during the year 1914.

Aerial Wire.—The 1914 inventory shows that there was 387.589 miles of #8 and 1,291.084 miles of #12 wire used for the long lines in Chicago. In 1911 the wire mileage, as shown on the estimate covering this purchase, was 1691.311, but this was not divided between #8 and #12. From the best estimate which the American Telephone and Telegraph Company's Engineers are able to make regarding the division, it is thought that there were about 3,000 pounds less copper wire in service in 1914 than in 1911. This amounts to a decrease of about $600 in plant. There was, however, an item of aerial loading coils, amounting to $1,652.12, listed in the 1914 inventory, of which $800 had been installed since 1911. This offsets the decrease in copper wire and as these figures are only approximations it was decided to use the figure of $75,494.62, shown as the original value of the wire in 1911 as a basis for the annual charges.

The depreciation charge against this is the American Telephone & Telegraph Company's standard straight line depreciation charge of 1.5% to which is added 1% covering extraordinary casualties, and the maintenance charge is 4% based on the American Telephone & Telegraph Company's experience with this class of plant in this territory. The American Company's estimate is used in this instance, as the Chicago Company's costs include charges for the drop wires over the city of Chicago which are high and which it is unfair to include in this figure.

Aerial Cable.—The 1914 inventory shows $9,350.03 as book value of aerial cable used by the Long Lines Plant. The depreciation charge against this is 5.8% based on the American Telephone & Telegraph Company's standard straight line depreciation, while the maintenance charge is 5.8% based on Chicago experience during the year 1914.

Underground Conduit.—The 1914 appraisal shows that there is a book value of $215,502.99 of underground conduit used in connection with the Long Lines Plant in Chicago. This is based on a unit cost of 31 cents per duct foot which was used at the time the 1911 appraisal was made. In 1914 the appraisal figures used 32 cents, but it was thought advisable to use the 31 cent figure. The American Telephone & Telegraph Company's standard straight line depreciation rate of 2% will be used, and the Chicago Company's experience for repairs during 1914, amounting to 1.1%, also will be used.

Underground Cable.—In the 1914 inventory the book value of underground cable used in connection with the Long Lines Plant was $125,500.69, to which should also be added an item of $16,169.81 covering loading coils.

The Highlands Cable which was recently built for the American Telephone & Telegraph Company amounted to $101,178.47, with $30,777.50 for loading, making a total of $273,626.47 for underground cable. As the loading is carried on the Auditor's books under account 3-C in a similar manner to the underground cable, there is no way of distinguishing how much of the investment is in the cable and how much in the loading, unless a separate account is kept. It is not thought advisable to do this, but the annual charges should be made up so as to care for the charges on both the loading and cable. The American Telephone & Telegraph Company's straight line depreciation rate on underground cable is 2.4%, while their depreciation rate on loading coils is 5%. We have computed the correct depreciation for this plant; ascertaining from that a percentage to be used on the total as a depreciation we get 2.8%. The Chicago experience for 1914 on underground cable was 1.96%; while the American Telephone & Telegraph Company's experience for loading coils is 1.5% The American Telephone & Telegraph Company's experience for loading coils is taken, as the Chicago Company has such a small percentage of loading coils compared with the total underground cable investment that a fair figure could not be obtained. By combining these two percentages we get a percentage of 1.9 which will be correct to use for repairs for the underground cable and loading coils, as long as the relation between the loading coils and underground cable remains practically constant.

Right-of-Way.—During 1913 a bill was rendered by the American Telephone & Telegraph Company for $1,695.00 covering right-of-way. This should be included in the plant on which the Long Lines Department pays annual charges. The depreciation rate to be applied against this is 6.3%—the American Telephone & Telegraph Company's standard straight line depreciation for right of way in cities. No maintenance charge will be applied against this right-of-way.

Administration.—The charge for administration as outlined in Mr. Thayer's letter to Mr. Sunny, dated February 14, 1911, is 1%. No change has been made in this.

Taxes.—The taxes to be paid by the American Telephone & Telegraph Company, in accordance with Mr. Thayer's let-

ter, are the average rate of taxes on plant in Chicago. For 1914 the taxes paid by the Chicago Telephone Company, City Division, were 2.2% of the average plant in service. This, however, includes the 3% city tax. We will therefore use 1.5% for taxes as in the agreement covering the inside plant of the Long Lines Department.

Interest.—Mr. Thayer's letter to Mr. Sunny provides that 10% interest shall be charged for a fair return on the investment. At the time this plant was purchased we paid the American Telephone & Telegraph Company the depreciated value of pole lines, cross arms, aerial wire, and on some of the aerial cable, and it was equitable that we should receive only 10% interest on the money which we expended at that time. However, as it was necessary to make replacements of this plant from time to time, we would gradually remove the depreciated value from the plant and invest the full book value, the depreciation being such that it would retire the depreciated plant at the end of the assumed life remaining in that plant. At the time this plant was purchased, it was assumed that the remaining life was as follows:

Pole Lines	6	years;
Cross Arms	10	"
Aerial Wire	10	"
Aerial Cable	4	"

We assume this would be the average life of the plant and that all of the plant which was purchased at depreciated value would be displaced in twice the average life. Thus, all of the pole lines would be replaced in 12 years; all of the cross arms in 20 years, etc. For example, in 20 years we will have invested the difference in the depreciated value of the cross arms and the book value of the cross arms as determined in 1911. Following out this plan, a curve as shown on the attached blue print was obtained. From this it is possible to ascertain some point at which date it would be equitable for the American Telephone & Telegraph Company to pay us interest on the full book value, and the interest on the full book value would be more than the interest which we should receive by the same amount, as the interest which we had been receiving prior to that time on the depreciated value was less than the amount which we should have received. It was calculated that this date would be February 1st, 1919. In order to simplify the accounting, instead of billing interest as shown on the curve, we will bill it at 10% on the book value from January 1st, 1915, and will allow the Long Lines Department

a credit each month amounting to the interest on the difference between $80,405.89, the depreciated value of the short-lived plant which we purchased, and $148,290.49, the book value of this plant until February 1st, 1919. This difference amounts to $67,884.60, or the interest will be $565.70 per month, or $6,788.46 per year.

If there is any substantial reduction in the pole lines, aerial wire, or that portion of the aerial cable which we purchased from the American Telephone & Telegraph Company before 1931, it will be necessary to recalculate the credit and the date at which the change is made along the lines outlined above. A statement is attached showing the interest calculations upon which the curve is based.

CHICAGO TELEPHONE COMPANY.

WISCONSIN TELEPHONE COMPANY.

Chicago, November 1, 1920.

Mr. W. R. Abbott,
General Manager.

BILL AGAINST A. T. & T. CO.—LONG LINES.

Attached is letter from Mr. J. S. Ford, Plant Engineer, dated October 16, 1920, covering new rates to be used in billing the American Telephone & Telegraph Company for the operation of the Long Lines Plant.

As the original percentages which we are now using were authorized by Mr. Hill in his letter of May 20, 1915, File 1821 Z, I am sending you Mr. Ford's letter for your approval.

Adjustment for the first nine months of this year and the regular bill for October is being made on the basis of the new rates, assuming that your approval will be received within the next few days.

U. F. CLEVELAND,
General Auditor.

Mr. U. F. Cleveland,
General Auditor.

The new rates as covered in Plant Engineer Ford's letter are approved.

11-2-20.

W. R. ABBOTT,
General Manager.

CHICAGO TELEPHONE COMPANY.

October 16, 1920.

Mr. W. R. Hearne,
Auditor of Disbursements.

The present basis of charge to the Long Lines Department covering interest, taxes, insurance, administration, depreciation and maintenance is the following percentages applied to the respective items of plant as shown.

Real Estate & Inside Plant:

Land	13.5
Buildings	22.8
C. O. Equipment	32.5
Furniture & Fixtures	32.5
Station Equipment	54.

Outside Plant:

Poles	22.8
Aerial Wire	19.
Aerial Cable	23.8
Underground Conduit	15.6
Underground Cable	17.2
Right-of-Way	18.8

A Study which was made by this department some months ago demonstrated that these charges were low as made against some of the items of plant.

This matter was taken up with Mr. Hogerton of the A. T. & T. Company and it is agreeable to that company that we bill as follows, as of January 1, 1920.

Bill actual maintenance as received from the Plant Accountant monthly under Account 708-07, including a proper proportion of supervision of repairs, plus ten per cent, excepting in the case of the three items—pole lines, underground conduit and underground cable—where a percentage charge shall be continued. The basis of billing will then be as follows:

	Maintenance. Actual cost plus 10% except for classes as indicated.	Percentage charge covering interest, taxes, insurance administration, depreciation, also maintenance in the case of pole lines, u. g. conduit & u. g. cable.
Real Estate & Inside Plant:		
Land	...	13.5
Buildings	...	17.8
C. O. Equipment	...	24.
Furniture & Fixtures	...	24.
Station Equipment	...	33.5
Outside Plant:		
Pole Lines	2.	22.8
Aerial Wire	...	15.
Aerial Cable	...	18.3
Underground Conduit	1.1	15.6
Underground Cable	1.9	17.2
Right-of-Way	...	18.8

It will be necessary to go back over these accounts from October 1st to January 1st, 1920, and render a bill covering the difference between the amount which has been billed and which would be billed in accordance with the above, which we would ask that you arrange to do.

J. S. FORD,
Plant Engineer.

JSF:HQ

CITY EXHIBIT 31-D.

Case No. 11894

Commission's Order of December 22, 1921.

Section 1.
Exhibit D.
Item 6.
Filed 3-11-1922.

Copy

Boston, April 16, 1908.

B. E. Sunny, Esq., President.
Chicago Telephone Company,
Chicago, Illinois.

Dear Sir:—

A definite and uniform plan for the settlement of accounts between this company and its associated operating companies is essential to a correct understanding and proper administration of the finances and accounts.

The following plan is believed to be fair and reasonable and we propose with your co-operation and assistance to put it into effect beginning May 1, 1908.

The percentage of gross earnings for each month is billed on the first of the second month following and is due and payable on or before the 10th of that month.

Interest on demand and long term notes will be billed by us for each month on the last day of that month. A discount of 2% will be allowed on interest bills if payment is received on or before the 20th of the month following their date. This will not apply to interest prior to April 1, 1908.

Long distance tolls collected by the operating companies or charged by them to their subscribers, less pro-rates and commissions, should be paid in to our New York office on or before the 30th of second month after the conversations—that is, tolls for March will be due and payable on or before May 30th. In the few cases where the amount due is not mutually agreed to before that date the approximate amount should be paid in on account and the balance paid as soon as the amount is definitely settled.

Miscellaneous charges against the associated operating companies as for material sold, pole rentals, etc., will be due and

payable on or before the 30th of the month following their date.

Charges against this company by the associated operating companies will be due and payable on or before the 30th of the month following their date.

We prefer to receive checks from the associated companies for the amount of our charges to them and to send them checks for the amount of their charges to us. Exceptions to this general rule may be made by our Treasurer when advisable to save exchange or for other reasons.

If the application of this plan makes it necessary for you to revise your estimated financial requirements for the year 1908, please advise us promptly.

Yours very truly,

(Signed) THEO. N. VAIL,
President.

CHICAGO TELEPHONE COMPANY,
Office of the President.

CHICAGO, September 19, 1913.

N. C. Kingsbury, Esq., Vice President,
American Telephone and Telegraph Company,
15 Dey Street, New York.

Dear Sir:

Referring to the proposed readjustment of the relations between your Company and the Chicago Telephone Company in connection with the long distance telephone business handled in Chicago, for the purpose of simplifying the operating and accounting routines, and for the purpose also of meeting the question recently raised by the city as to the right of the A. T. & T. Company to operate in the City of Chicago, we submit the following proposition:

The Chicago Company for a long period has been receiving as its proportion of the revenue of the long distance traffic in Chicago a specific rate per message, and in addition compensation for plant, lunches, lockers, toilet facilities and supplies to your employees; battery current and the maintenance of batteries; electric light; and space in its buildings, which

items, summarized for a six months' period, March to August, 1913, inclusive, are as follows:

335,597 messages at 17c each	$ 57,051.49
For use of plant	46,775.89
Lunches, Lockers, and toilet supplies	4,209.15
Battery current and Maintenance of batteries	1,295.47
Electric light and rent for space occupied	8,487.77
Miscellaneous items	189.71
Total	$118,009.48
Average per month	$ 19,668.25

We have recently purchased from you the long distance switchboards located in the toll building on Franklin Street, near Washington, and the Morrell Park Test and Operating Station, and the contents thereof, at a price to be determined by appraisal.

We will take over into our employment, as of September 1st, 1913, all of the employees now in the service of the A. T. & T. Company necessary to conduct the long distance traffic in Chicago, and the amount of their compensation shall be charged for in addition to the amount referred to above, plus ten per cent. (10%).

Whatever other items of expense the Chicago Company is put to, to carry out this plan, shall also be added to the above, with ten per cent. (10%).

When the value of the switchboards in the toll building and the Morrell Park Station has been ascertained and paid, the Chicago Company shall be entitled to an amount which will represent a reasonable return on the investment and the cost of maintaining the property; and it shall also be entitled to a proper return on the investment and cost of maintenance of any additional switchboard or facilities supplied on account of the long distance traffic.

The long distance traffic shall be conducted in accordance with standard rules.

This arrangement shall be effective as of September 1st, 1913.

Yours very truly,
CHICAGO TELEPHONE COMPANY,
By B. E. SUNNY,
President.

Accepted:
AMERICAN TELEPHONE AND TELEGRAPH COMPANY,
By N. C. KINGSBURY,
Vice President.

PLANT ACCOUNTING—Method of handling work in City of CHICAGO.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY.

CHICAGO, ILL., Jan. 10, 1914.

Chicago Telephone Company,
Mr. A. B. Crunden,
Asst. Auditor of Disbursements,
Chicago, Ill.

Dear Sir:

Herewith is a copy of memorandum regarding Long Lines situation in Chicago.

Yours truly,
T. G. MILLER,
Division Superintendent of Plant.

TGM-G
Enc.

DATA REGARDING ROUTINE EXISTING FOR THE HANDLING OF ACCOUNTING BETWEEN THE A. T. & T. AND CHICAGO TELEPHONE COMPANIES IN CONNECTION WITH EXPENSE INCURRED WITHIN THE CITY LIMITS OF CHICAGO.

(a) District Plant Chief and his Cashier are considered as Joint Men and are carried on A. T. & T. roll. All other employees under the District Plant Chief located in the City of Chicago are considered joint employees and carried upon the Chicago Telephone Company's roll.

(b) Neither Mr. Kehnroth or Mr. Nauert carry an advance from the Chicago Telephone Company. The latter Company makes up each week the *pay roll for regular authorized employees*, hands to Mr. Miller for approval and then sends individual checks in care of A. T. & T. District Cashier for distribution. A. T. & T. District Cashier issues a monthly Summary of Time for such pay rolls.

Temporary help and overtime payments for Chicago Telephone employees are taken care of with A. T. & T. funds, blanketed each week as Chicago Telephone Expense by District Cashier, who is reimbursed by A. T. & T. Division Cashier out of A. T. & T. funds, the latter in turn being reimbursed by the Chicago Telephone Company and the amount depos-

ited to A. T. & T. account. These payments included in monthly Summary of Time, made up by District Cashier.

4. *T. & T. employees reporting to Mr. Kehnroth* are covered in A. T. & T. reports.

Sundry Disbursements for A. T. & T. and Chicago Telephone Companies are kept separate as far as possible and reported to proper company. Joint Expense is reported by District Cashier on Chicago Telephone reports; the A. T. & T. Co.'s proportion being shown under caption of "Job 1-e" to distinguish it from the Chicago Telephone Expense which is reported under Account 708-07 and cleared to proper accounts. Exception is made in the case of Leased Line and Traffic Expenses which are shown without any additional heading.

All above expense is paid for with A. T. & T. funds and reimbursement is made in a manner similar to temporary and overtime pay roll disbursements.

(c) It was our understanding that Mr. Devereaux would render monthly bills against the Chicago Company for 12.5% of the District Plant Chief's and Cashier's salaries and expenses. See copy of Mr. Devereaux's letter of October 8, 1913, to Mr. B. S. Garvey, copy of which is attached hereto.

In the monthly bills which the Auditor does render, we find an item of $28.13 charged against 706-11-4100 which is assumed to represent the proper proportion of Mr. Kehnroth's salary as it figures accordingly, but no other charge against District 4100 is shown, hence we must assume that no proportion of the A. T. & T. District Cashier's salary is billed against the Chicago Telephone Company.

The bills which he renders monthly indicate that approximately 5% of the salaries and expenses of the entire Division office are billed to the Chicago Company, which, so far is in accordance with our understanding of the arrangements.

Incidentally the Chicago Telephone Company question the justice of their being charged with 5% of the Division or District traveling expenses, as practically no expense is incurred inside City Limits for such a purpose.

(d) The Chicago Telephone Company bills the A. T. & T. Company each month for:

(1) That part of District Plant Chief's Chicago Telephone Company's pay roll and sundry expenses which apply to plant outside the City.

(2) Material and Supplies ordered on Chicago Telephone requisitions on the Western Electric Company or transferred by District Plant Chief and reported on Material Summaries to Chicago Telephone Company and which are wholly or partly chargeable against the A. T. & T. Company.

(e) The Chicago Telephone Company adds 10% to all bills against us except those for rental of plant.

(f) All leased Line expense incurred by the District Plant Chief's forces inside the City limits is first paid by the Chicago Company and in turn billed against the A. T. & T. Company, plus 10%.

(g) The whole of that proportion of the expenses of the Division Superintendent of Plant and the District office which has previously been billed against them by the A. T. & T. Company, as noted in (c). This is not in accordance with the understanding of the arrangements which Mr. Crunden, of the Chicago Telephone Company, and I had at the time of the various conferences. It is also not in accordance with Mr. Devereux's letter to me of November 1, 1913, and my reply of November 22, 1913. My understanding of how this item was to be treated was covered in my letter to you of November 7, copy of which is attached.

The present practice of billing all of it back originated in a telephone conversation between our Auditor's office and the Auditor's office of the Chicago Telephone Company in connection with the October bill. See letter of this date from Mr. Garvey to Mr. Devereux.

These bills for October and November were returned unapproved on December 27.

The following details of the accounting may be of help in understanding the situation.

The Division Accountant summarizes and forwards to the Chicago Telephone Company

(1) Summary of Regular, Temporary and Overtime pay rolls of District Plant Chief and Division Gangs.

(2) Summary of Sundry Disbursements of Division Plant Chief and Division Gangs.

(3) Summary of Material Used and Transferred, Recovered and Plant Displaced in connection with plant inside city limits.

Test Room salaries charged to 3R are divided 12.5% Chicago Telephone Company and 87.5% A. T. & T. Company.

Salaries of linemen located in city limits, divided 48% and 52%.

Supervision expense of District Plant Chief's office (salaries and expenses) divided 12.5% and 87.5%.

No change whatever has been made in the methods of handling work in the city. When A. T. & T. line or equipment gangs are brought in to do estimate work they are furloughed on A. T. & T. rolls and carried on rolls of the Chicago Telephone Company.

Chicago, Janury 10, 1914.

Apportionment of expenses of joint employees.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY.

15 Dey Street.

New York, October 8, 1913.

A. F. 36-2-2.

B. S. Garvey, Esq., General Auditor,
Chicago Telephone Company,
Chicago, Ill.

Dear Sir:—

Confirming our understanding that the Chicago Company should be billed a certain proportion of salaries and expenses of our joint employees, it is proposed that your Company be billed on the following bases:

Traffic Department: The Chicago Company should be billed for 22.2% of the salaries and wages of the Division Traffic Superintendent and his immediate office force and 70.6% of the salary of the District Traffic Chief. This percentage is based on the ratio between the Long Distance messages originating in the City of Chicago and the number of Long Distance messages originating in the Chicago District and the Fourth Division respectively.

Plant Department: The Chicago Company should be billed for 5% of the salaries and wages of the Division Plant Superintendent and his immediate office force and 12.5% of the salary of the District Plant Chief. This percentage is based on the ratio between the mileage in the City of Chicago and the

mileage in the Chicago District and the Fourth Division respectively.

Will you please advise me if this is satisfactory to your Company.

Yours truly,

F. L. DEVEREUX,
Auditor.

October 10, 1913.
File GA

Mr. F. L. Devereux,
Auditor, Long Distance Lines Dept.,
A. T. & T. Company,
15 Dey Street, New York City.

Dear Sir:

Replying to yours of the 8th inst., A. F. 36-2-2.

The percentages you name for billing this company a proportion of the salaries and expenses of the joint employees is satisfactory to this company.

Yours truly,

.....,
General Auditor.

G-B

CITY'S EXHIBIT 32.

CHICAGO TELEPHONE COMPANY

March 10, 1911.

American Telephone and Telegraph Company,
Mr. H. B. Thayer, Vice President,
15 Dey Street, New York.

Dear Sir:

We will accept your proposition dated February 14, 1911, that in place of special rental for trunk lines and terminal facilities in the city of Chicago these lines will hereafter be used jointly by our Company with yours and that you will pay us five cents (5¢) for each outgoing paid A. T. and T. call from Chicago for the services rendered; such payments to begin January 1, 1911, and continue until further agreement between us.

Yours very truly,

B. E. SUNNY,
President.

CITY'S EXHIBIT 33.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

New York, December 5, 1917.

Mr. B. E. Sunny, President,
Chicago Telephone Company,
Cleveland Telephone Company,
Michigan State Telephone Company,
Wisconsin Telephone Company,
Chicago Illinois.

Dear Mr. Sunny:

The Executive Committee of this Company, in view of the extraordinary conditions due to the state of war now existing, today adopted a resolution authorizing the computation of the originating commissions payable under existing contracts by this Company to your Companies, upon the following basis, beginning January 1, 1918:

(a) Where the "L" operator of the associated company as defined by this Company's operating rules is in charge of the communication, 25% of the cash receipts from each single connection upon which the associated company is entitled to a commission, not exceeding 30¢ for any single connection.

(b) Where the "L" operator of this Company as defined by this Company's operating rules is in charge of the communication, 25% of the cash receipts from each single connection upon which the associated company is entitled to a commission, not exceeding 12¢ for any single connection.

(c) On business originating at pay stations upon which the associated company is entitled to a commission if in class (a) twice the commission above provided for class (a) business, and if in class (b), twice the commission above provided for class (b) business.

This is upon the condition that this Company reserves the right at any time to discontinue the payment of said commissions upon the terms stated in this letter, and to resume their payment upon the terms of said contract.

Please advise me at your convenience whether or not this temporary modification of these contracts is acceptable to you and your Executive Committee or Board of Directors.

Very truly yours,

U. N. BETHELL,
Vice President.

CITY'S EXHIBIT 34.

OFFICE OF THE PRESIDENT,
Chicago, Illinois.

December 10, 1917.

Mr. U. N. Bethell, Senior Vice President,
American Telephone & Telegraph Company,
195 Broadway, New York, N. Y.

Dear Mr. Bethell:

I have yours December 5th increasing the originating commissions to the several companies in this Group on Long Lines business.

I am very sure that the Companies will be glad to accept this increased compensation, and formal action will be taken by the Directors or Executive Committees during the next two or three weeks.

Yours truly,

B. E. SUNNY.

CITY'S EXHIBIT 35.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

New York, December 14, 1917.

Mr. B. E. Sunny, President,
Chicago Telephone Company,
Chicago, Illinois.

Dear Mr. Sunny:

The resolution adopted by our Executive Committee, respecting originating commissions payable to Associated Companies under existing contracts, excepted "commissions upon business in the City of Chicago, as to which special conditions obtain." I find, upon looking into the matter, that this exception was not specifically mentioned in the advice sent to you. I am told that you are familiar with the circumstances, and will understand why this exception was made. I am sorry that through an unintentional oversight it was not mentioned in my letter of advice to you of the 5th instant, and beg that in presenting the matter to your Executive Committee or Board of Directors you will modify such advice accordingly.

Very truly yours,

U. N. BETHELL,
Vice President.

CITY'S EXHIBIT 36.

OFFICE OF THE PRESIDENT

Chicago, Illinois.

December 17, 1917.

Mr. U. N. Bethell, Senior Vice President,
American Telephone & Telegraph Co.,
195 Broadway,
New York, N. Y.

Dear Mr. Bethell:

I have yours December 14th and I note that the recent change in compensation by the A. T. & T. for handling long lines business does not apply in the City of Chicago because of the special conditions which obtain here. In presenting the matter to the Board of Directors, I will so advise them.

Does the added compensation go to the New York Company with reference to New York City business?

Yours truly,

B. E. SUNNY.

CITY'S EXHIBIT 37.

TELEGRAM.

TN 16 12:55 1-14-19 5 New York.
B. S. Garvey, Chicago, Ill.

Outward minutes may be omitted from check ledgers as well as from Toll Reports. Include report charges with tolls but do not consider as messages. (WMG)

P. W. SAXTON.

CITY'S EXHIBIT 38.

January 16, 1919.
File AR-147.

Mr. P. W. Saxton, Acting Auditor,
American Telephone & Telegraph Co.,
195 Broadway, New York.

Dear Sir:

Compensation For Report Charges.

Referring to your telegram of the 14th inst., instructing that report charges are to be included with tolls but are not to be counted as messages. Under this ruling we will re-

ceive no originating commission though we will have the operating expense unless you contemplate a study for the purpose of revising our compensation.

Will you be kind enough to advise me on this point.

Yours truly,

JH General Auditor.

CITY'S EXHIBIT 39.

Payment of Commission on Report Charges.

AMERICAN TELEPHONE & TELEGRAPH CO.

195 Broadway

New York, January 25, 1919.

A. F. 105-O.

Mr. B. S. Garvey, General Auditor,
Central Group,
Chicago, Ill.

Dear Sir:

Replying to your letter of January 16th, File A. R. 147, our General Manager has authorized the payment of the regular rates of commission on the "report charges" provided for in the new schedule of toll rates.

It will be necessary, therefore, for us to know the number of report items included in our monthly toll reports, in order to make an adjustment for the commission due your Companies on these charges from January 21st. Will you please arrange to keep a memorandum record of the number of these items, as requested in our telegram of January 23rd, with no distribution as to points, and advise us of the total number for your Companies each month, until a new study of commission can be made.

We intend to recalculate the commission averages for all companies as soon as possible, and would like to make our studies for your companies on the basis of the business reported for March, 1919. If this is satisfactory to you, will you please have your companies furnish us with the usual commission data for the month of March, making separate statements for report charges.

As stated in our telegram of January 14th, the report charges should be included in our toll reports in the "This Line" column but should not be considered as messages.

Yours truly,

P. W. SAXTON,
Auditor.

CITY'S EXHIBIT 40.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

New York, May 28, 1920.

Mr. B. E. Sunny, President,
Chicago Telephone Company,
Wisconsin Telephone Company,
Chicago, Illinois.

Dear Mr. Sunny:

Referring to our letter of December 5, 1917, to your companies, agreeing to increase the fifteen per cent. (15%) originating commission provided for in your companies' license contract, and to the redraft of that contract subsequently executed by our respective companies, the execution of this redraft by your companies does not affect the temporary arrangement as to the originating commission, under the letter in question. This temporary arrangement continues, subject to this company's right to discontinue it, reserved by that letter.

Yours very truly,

H. B. THAYER,
President.

CITY'S EXHIBIT 41.

Whereas, the American Telephone and Telegraph Company has heretofore entered into a certain agreement with the Chicago Telephone Company, bearing date the first day of July, 1891, and has also entered into a certain agreement with the Central Union Telephone Company, bearing date the second day of November, 1891, and

Whereas, Section 1, of Article Second of each of said agreements provides for certain payments to be made by the American Telephone and Telegraph Company as provided in a "Schedule A," which schedule may be changed or modified from time to time by mutual agreement of the General Managers of the parties to the agreement as therein provided, and

Whereas, the Illinois Bell Telephone Company is the successor in name of the Chicago Telephone Company and, with respect to the points hereinafter mentioned, is the successor in business of the Central Union Telephone Company;

Now, Therefore, pursuant to the provisions of said agree-

ment of July first, 1891, the undersigned officers of the undersigned companies do hereby agree that the American Telephone and Telegraph Company shall pay to the Illinois Bell Telephone Company, for the labor and service provided for in Section 1, of Article Second of said agreement, the sum of One hundred thirty-four and 99/100 Dollars ($134.99) per month, as follows:

For labor and service at:

Cairo, Illinois		$ 43.46
Champaign, Illinois		3.86
Danville,	"	.75
La Salle,	"	15.91
Mt. Vernon,	"	18.37
Murphysboro,	"	14.16
Peoria,	"	.82
Quincy,	"	19.24
Springfield,	"	10.87
Watseka,	"	7.55
		$134.99

So long as said labor and service shall be rendered by said Illinois Bell Telephone Company, or until the arrangement hereby made shall be changed by virtue of the provisions of said Article Second of said agreement of July first, 1891, This schedule shall be effective as of December first, 1920, and shall supersede as of that date any previous "Schedule A" of the agreement last above mention, and any provisions affecting points in the State of Illinois contained in any Schedule A of said agreement of November second, 1891.

Dated this 3rd day of May, 1921.

F. A. STEVENSON,
Director, Long Line Department.
American Telephone and Telegraph Company.

W. R. ARBOTT,
Vice President & General Manager,
Illinois Bell Telephone Company.

(C. M. S.)

CITY'S EXHIBIT 42.

Schedule A.

Whereas, the American Telephone and Telegraph Company has heretofore entered into a certain agreement with the Chicago Telephone Company, now named the Illinois Bell Telephone Company, bearing date the first day of July, 1891, and

Whereas, Section 1, of Article Second of said agreement provides for certain payments to be made by the American Telephone and Telegraph Company as provided in a "Schedule A," which schedule may be changed or modified from time to time by mutual agreement of the General Managers of the parties to the agreement as therein provided;

Now, Therefore, pursuant to the provisions of said agreement of July first, 1891, the undersigned officers of the undersigned companies do hereby agree that the American Telephone and Telegraph Company shall pay to the Illinois Bell Telephone Company, for the labor and service provided for in Section 1, of Article Second of said agreement, the sum of Two hundred forty-three dollars and ninety-one cents ($243.91) per month, as follows:

For labor and service at:

Bloomington,	Illinois	$ 108.92.
Cairo,	Illinois	43.46.
Champaign,	"	3.86.
Danville,	"	.75.
La Salle,	"	15.91.
Mt. Vernon,	"	18.37.
Murphysboro,	"	14.16.
Peoria,	"	.82.
Quincy,	"	19.24.
Springfield,	"	10.87.
Watseka,	"	7.55.
		$243.91

So long as said labor and service shall be rendered by said Illinois Bell Telephone Combpany, or until the arrangement hereby made shall be changed by virtue of the provisions of said Article Second of said agreement of July first, 1891, This schedule shall be effective as of January first, 1922, and

shall supersede as of that date any previous "Schedule A" of the agreement of July first, 1891.

Dated this 23rd day of August, 1923.

F. A. STEVENSON,
Director, Long Lines Department.
American Telephone and Telegraph Company.

W. R. ARBOTT,
President.
Illinois Bell Telephone Company.

CITY'S EXHIBIT 43.

SCHEDULE A.

Whereas, the American Telephone and Telegraph Company has heretofore entered into a certain agreement with the Chicago Telephone Company, now named the Illinois Bell Telephone Company, bearing date the first day of July, 1891, and

Whereas, Section 1, of Article Second of said agreement provides for certain payments to be made by the American Telephone and Telegraph Company as provided in a "Schedule A," which schedule may be changed or modified from time to time by mutual agreement of the General Managers of the parties to the agreement as therein provided;

Now, Therefore, pursuant to the provisions of said agreement of July first, 1891, the undersigned officers of the undersigned companies do hereby agree that the American Telephone and Telegraph Company shall pay to the Illinois Bell Telephone Company, for the labor and service provided for in Section 1, of Article Second of said agreement, the sum of Three hundred fifty-three dollars and seventy-nine cents ($353.79) per month, as follows:

For labor and service at:

Bloomington,	Illinois	$129.94
Cairo,	Illinois	65.99
Champaign,	"	33.59
La Salle,	"	2.07
Mt. Vernon,	"	37.16
Murphysboro,	"	21.22
Peoria,	"	2.71
Quincy,	"	61.11
		$353.79

So long as said labor and service shall be rendered by said Illinois Bell Telephone Company, or until the arrangement hereby made shall be changed by virtue of the provisions of said Article Second of said agreement of July first, 1891, This schedule shall be effective as of September first, 1923, and shall supersede as of that date any previous "Schedule A" of the agreement of July first, 1891.

Dated this 22d day of August, 1924.

F. A. STEVENSON,
Director, Long Lines Department.
American Telephone and Telegraph Company.
W. R. ARBOTT,
President.
Illinois Bell Telephone Company.

Noted F. E. Smith,
Division Auditor of Receipts.

CITY'S EXHIBIT 44.

ILLINOIS BELL TELEPHONE COMPANY

DISTRIBUTION OF CHICAGO CROSS A. T. & T. TOLLS BETWEEN I. B. T. CO. AND A. T. & T. CO.—1913 TO 1925

	Chicago Gross A. T. & T. Tolls	I. B. T. Co.'s proportion	A. T. & T. Co.'s proportion
Year 1913	$ 959,754.74	$ 225,103.45	$ 734,651.29
1914	1,053,169.56	288,398.17	764,771.39
1915	1,208,772.94	329,190.81	879,582.13
1916	1,461,190.73	323,720.04	1,137,470.69
1917	1,601,313.87	346,341.27	1,254,972.60
1918	1,820,831.93	393,825.50	1,427,006.43
1919	2,854,580.39	517,651.37	2,336,929.02
1920	3,558,003.75	676,736.06	2,881,267.69
1921	3,693,848.36	754,467.05	2,939,381.31
1922	4,214,101.22	888,603.01	3,325,498.21
1923	4,490,167.89	991,026.83	3,499,141.06
1924	4,620,498.83	1,089,963.73	3,530,535.10
1925	5,309,724.00	1,225,696.36	4,084,027.64

In addition the Illinois Bell Telephone Company is reimbursed for the cost of operating the Long Lines equipment.

CITY'S EXHIBIT 45.

ILLINOIS BELL TELEPHONE COMPANY.

Date

To

I hereby certify that the following is a true copy of resolution duly adopted by the Board of Directors of the Illinois Bell Telephone Company at a meeting duly called and held on January 16, 1882 at which meeting a quorum was present.

.....

Secretary.

The Vice President reported the negotiation of a contract and license with the American Bell Telephone Company, and that such contract has been executed on the part of this Company by the President and Secretary, and the seal of the Corporation affixed thereto.

On motion the acts of the officers of this Company in the negotiation and execution of the above contract were ratified and confirmed.

City's Exhibit 46.

ILLINOIS BELL TELEPHONE COMPANY

	Percentage of outstanding stock as of December 31 of each year owned by A. T. & T. Co. or A. B. T. Co. in their own name or in the name of others held for them	No. of stockholders other than A. T. & T. Co. or A. B. T. Co.end of year
1881	50.700%	
2	50.200	
3	50.267	
4	47.763	
5	45.743	
6	45.636	
7	43.675	
8	45.843	
9	45.057	
1890	37.038	
1	51.910	
2	51.939	
3	52.065	
4	52.065	
5	52.039	
6	51.922	
7	51.938	
8	51.915	
9	51.920	
1900	52.000	
1	52.000	
2	52.029	
3	52.036	
4	52.036	
5	52.036	
6	52.036	
7	55.395	
8	52.036	
9	52.036	
1910	52.036	
1	52.036	1382
2	97.479	145
3	97.579	140
4	97.593	132
5	97.612	126
6	97.639	120
7	98.203	126
8	98.304	129
9	98.424	126
1920	98.445	123
1	98.663	129
2	98.848	125
3	98.722	141
4	98.902	139
5	98.956	140

CITY'S EXHIT 47.

STATE OF ILLINOIS.

FILED JUNE 13, 1923.

Chicago Office.

ILLINOIS COMMERCE COMMISSION.

ANNUAL REPORT OF THE DIRECTORS OF AMERICAN TELEPHONE & TELEGRAPH COMPANY TO THE STOCKHOLDERS FOR THE YEAR ENDING DECEMBER 31, 1911.

REARRANGEMENT OF TERRITORY.

There has been some misunderstanding in connection with the acquisition of the minority interests of certain associated companies. In every one of these companies the American Telephone and Telegraph Company already owned a controlling interest, in fact, held about 70 per cent. of the whole, which has been increased to over 95 per cent. by the recent acquisitions. Each of the companies was an integral part of the Bell System. Each of the companies was connected with the others by the long-distance lines of the American Telephone and Telegraph Company, and each of the companies under license contract with that company. The company is now in a position to carry out its policy of "rearrangement of territory," as outlined in previous reports, and without raising questions of conflicting interests, so to arrange the territory that it will conform to commercial and natural lines. In the few cases covering small areas not embraced in this control, the working arrangements are harmonious and the operations in perfect accord with the whole system.

The ultimate object and the reasons for this rearrangement are briefly as follows:

Any telephonic connection must be continuous from any point of communication, as a center, to any point to be communicated with, even to the utmost speaking distance. To obtain continuous speaking circuits there must be uniformity of practice and equipment and perfect co-operation in "operation" over the whole circuit. Therefore, there can be no restrictive or interfering boundaries between exchanges of a telephone system, and any system should be co-extensive with any territory naturally intercommunicating from national, geographical, or racial reasons.

To have this uniformity and co-operation there must be

common interest, under common control, either through ownership of property, ownership of controlling interest, combination, or agreement; whichever way it is, it must be sufficiently strong to constitute practically one system, intercommunicating, interdependent, universal.

(See discussion of relations and object of rearrangement in previous reports, particularly 1909, 1910.)

So long as each state retains control of its intra-state affairs and its corporate creations, and so long as interstate traffic and interstate service corporations cannot be detained by state boundaries, so long will some sort of state recognition of the corporations of other states or some corporate machinery be necessary in each state to bring all service corporations doing an interstate business under state control and operative conditions within each state. (pp. 25, 26, 27.)

ORGANIZATION OF THE BELL SYSTEM.

Under this rearrangement of territory the American Telephone and Telegraph Company, controlling the entire Bell System, will as it has in the past exercise the functions of a "centralized general administration." All questions of policy common to all, all common matters which may have an effect upon the system as a whole, will be settled by the Central Administration. As one administration will do for all what each would have to do for itself, it has the advantage of economy and will maintain uniformity.

For operating purposes there will be eight or ten divisions with boundaries determined by present commercial conditions, instead of a much larger number of divisions with boundaries fixed more or less accidentally or by other considerations prevailing twenty-five or thirty years ago. Each division whether operated directly or through corporate organizations will have a responsible local administration, supreme in the "intra-division" operations. Each division in turn will be divided into districts with a subordinate but responsible local administration, and in many cases these districts will be divided into sub-districts. In each district or sub-district there will be a subordinate but responsible local representative who will in all local routine matters be to the public the representative of the whole system.

All lines of responsibility and suggestion will go up, from the local representatives to the Central Administration. All lines of authority down, from the Central Administration to the local chief.

Under the Bell organization each associated company or group of companies is now, and each division hereafter will

become an autonomous whole, with its own local control and identity, and within the limits of the general policy and authority, absolute on matters pertaining to or which affect only that territory.

Such an organization avoids that general tendency in all combinations to concentrate too much, or to become unwieldy and unmanageable, and thus lose all the economical or effective operating advantages.

There are limits of active usefulness beyond which the physical or mental capacity of individuals will not extend.

The organization as constituted will be flexible enough to enable any rearrangement to be made of the whole or any part, in any way which may be found necessary or advantageous from reasons of policy or from business or legal reasons, without affecting the business.

Future financing may be done locally, by the divisions or districts, or it may be done by the Central Administration, or partly by each, as best will meet commercial or business conditions at the moment. It will be necessary only to consult expediency.

But the great advantage is that each division and each sub-division within wide limits is an autonomous whole; there is life and responsibility in the administration and operations of every separate division and sub-division—such life and responsibility as will carry the business along as an independent entity for almost indefinite periods under any possible conditions which may arise. With such conditions, nothing can happen which would be disastrous to the business, for whatever might happen would autonomously right itself, or be righted by the concerted action of this army of individuals, or by some individual of the army, now being trained to action and to take responsibility by having responsibility put upon them.

With such a body of men, educated in technicalities and theories, which by practical experience, they have subordinated to usefulness, with a trained capacity for taking responsibility—steadily moving upwards—there will always be a body of fit men to choose from in any emergency. (pp. 27, 28, 29.)

CITY'S EXHIBIT 48.

STATE OF ILLINOIS.

FILED JUNE 26, 1923.

Chicago Office.

ILLINOIS COMMERCE COMMISSION.

TESTIMONY OF UNION N. BETHELL CONCERNING LETTERS TO MR. SUNNY.

At the time this bill was filed Mr. Sunny was a vice-president of the American Company and receiving a salary of $6,000. I arranged that payment. I don't remember the following letter submitted to you, from my letter book today, dated July 23, 1912, reading as follows:

"Mr. B. E. Sunny,
The Mount Washington,
Bretton Woods, White Mountains, N. H.
Dear Mr. Sunny:

To carry out the arrangement which was agreed upon when I was last in Chicago, the companies in the Central group should be asked to compensate you at the rate of $30,000 per year from July 1, 1912.

I presume the matter will have to be submitted to the directors or executive committee at their next meeting. Meanwhile, I think it would be proper for you to arrange with the general auditor of the companies to pass vouchers in your favor at that rate from the date named.

Very truly yours,
U. N. BETHELL,
Vice President."

I have no doubt that is a correct letter though. The arrangement was of this kind: I had met Mr. Sunny in Chicago; he had an invitation to go elsewhere, to leave the telephone business and naturally the question of salary was involved. Thirty-six thousand dollars was agreeable to him, but it was thought a little higher than the five group companies ought to pay and I agreed to carry $6,000 of that amount. He was to take up with his directors and executive committee the matter of distributing his salary of $30,000 between the five companies, and the American Company would carry the $6,000. That was for the purpose of re-

taining Mr. Sunny's services to this group, and the $6,000 was practically a contribution of the American Company to that end. I have forgotten the exact amount he had been receiving from the American Company prior to this time. I think it was four or five thousand dollars. I think all together he was getting about $30,000, so the group companies were paying him twenty-five or six thousand dollars prior to that time. That was in the summer of 1912 the change took place. I also wrote Mr. Sunny another letter on the same date, which is as follows:

"Mr. B. E. Sunny,
The Mount Washington,
Bretton Woods, White Mountain, N. H.
"Dear Mr. Sunny:

I have your note of the 17th from Bretton Woods and beg to say that I arranged for an adjustment of your compensation to July 1, as was agreed upon when I was last in Chicago. The payment of $6,000 which you acknowledged was made wholly by the American Telephone and Telegraph Company, which I thought fair and proper under the circumstances. I have also arranged that from July 1st your compensation from the A. T. & T. shall be at the rate of $6,000 per year. Your compensation, therefore, from July 1st, from the Central group companies shall be at the rate of $30,000 per year and be charged to the joint account of those companies. I suppose it will be necessary to have some action taken by the executive committees of the companies at their next meeting. Meanwhile I think it would be all right for you to arrange with the general auditor, if you so desire, to approve vouchers in your favor at that rate.

Hoping you are continuing to have an enjoyable vacation, I am

Very truly yours,
U. N. Bethell,
Vice President.

"P. S. You may prefer to use the inclosure, which makes no reference to the adjustment by the A. T. & T. Company for your compensation from July 1st, from this Company."

I wrote him two separate letters, each specifying the terms of his compensation, but one of them not mentioning the American Company contribution of $6,000, simply because

Mr. Sunny might prefer not to disclose to every one what he was getting from the American Company and I left it to his choice to do as he liked. By "every one" I mean all of the different companies. So long as the salary he received from a group company was fair from the standpoint of that company I presumed that company would not care to know to what extent if any he was helped out by somebody else and retained in the service. I thought it was perfectly proper if he chose to do it that the directors of the Chicago Company and the Union Company should be kept in ignorance of the fact that their president, Mr. Sunny, was being paid $6,000 by the American Company. I did not know as a fact that the Union Company directors did not know anything about Mr. Sunny's getting $6,000 from the American Company. I never talked with any of the Union Company directors about it. I was never present at any meeting of the directors of the Union Company when the matter was discussed. I don't know as a matter of fact that no action was ever taken by the directors or executive committee of the Union Company approving his salary of $30,000. Of my personal knowledge I do not know anything about whether Mr. Sunny continued to approve vouchers in his own favor at the rate of $30,000 a year from the group companies without having any action taken by the directors or executive committee of the Union Company. It was apparently my suggestion in the letter that the general auditor should pass vouchers for him at that rate until they had taken action. I imagined it would be only a short time. Now, Mr. Sunny gets nothing from the American Company. He was paid $6,000 as vice-president and he is not now vice-president of the American Company. He ceased to be such last March, or it may have been March a year ago, I have forgotten the exact date, either March 1914, or 1915. He is not now in the employ of the American Company.

CITY'S EXHIBIT 49.

ILLINOIS BELL TELEPHONE COMPANY.

Date

To

I hereby certify that the following is a true copy of resolution duly adopted by the Board of Directors of the Illinois Bell Telephone Company at a regular meeting duly called and held on April 26, 1911 at which meeting a quorum was present.

.....

Secretary.

The following preamble and resolutions were introduced and upon motions duly seconded and put they were severally adopted:

Whereas: It is in the opinion of the active officers of this Company, desirable, for the purposes of greater operating efficiency and economy, to include in one operating unit the Wisconsin Telephone Company and Michigan State Telephone Company, the Chicago Telephone Company, and Central Union Telephone Company and The Cleveland Telephone Company, and at the same time preserve to each its separate corporate existence and accounts; and

Whereas: Twenty-five (25) of the officers and others of each of said companies are the same individuals, and others will be so employed,

Therefore Be It Resolved: That the necessary expense of such action, as above set forth, be properly and fairly proportioned among the several companies, and that such expense be apportioned severally to the five (5) companies upon the same percentage that each company previously paid for the same officials or purposes.

Be It Further Resolved: That the compensation of any additional officials or heads of departments or other employes brought into this larger operating unit, and all expenses of the officers provided for shall be divided among the five (5) companies upon the same basis.

Be It Further Resolved: That all such officials may be paid by check of any one of the five (5) named companies and the sum of such payments may be distributed, in accordance with this resolution, by the General Auditor upon the books of the five (5) companies.

CITY'S EXHIBIT 50.

STATE OF ILLINOIS.

FILED JUNE 13, 1923.

Chicago Office.

ILLINOIS COMMERCE COMMISSION.

(Pages 6 to 14 both inclusive.)

PORTIONS OF A STIPULATION OF FACTS, DATED JANUARY 30, 1914, TO WHICH THE CHICAGO TELEPHONE COMPANY, (NOW THE ILLINOIS BELL TELEPHONE COMPANY) WAS A PARTY, ENTERED INTO IN WILLIAM A. READ, ET AL., V. CENTRAL UNION TELEPHONE COMPANY, ET AL., IN THE SUPERIOR COURT OF COOK COUNTY AND INTRODUCED IN EVIDENCE IN CITY OF PEORIA V. RECEIVER, CENTRAL UNION TELEPHONE COMPANY, NO. 3043 BEFORE THE PUBLIC UTILITIES COMMISSION OF ILLINOIS.

(19) On or about the first day of January, 1894, the American Bell Company and the American Company entered into a contract, and also duly executed the license contract therein referred to as Exhibit A, in words and figures as follows:

"THIS AGREEMENT Made this first day of January, 1894, by and between The American Bell Telephone Company, a corporation created under the laws of the Commonwealth of Massachusetts, of the first part, and The American Telephone and Telegraph Company, a corporation created under the laws of the State of New York, of the second part,

WITNESSETH:

WHEREAS the second party has, under license from the first party to use the patents which it, said first party, owns or controls or which it has the right to license under and under permission to exercise the rights therefor reserved by the first part in its grant of licenses for exchange purposes and for extra-territorial lines, established extra-territorial lines for connecting points within the territories of the several licensees of the first party with points in the territories of others of said licensees, and

WHEREAS it has been understood and agreed by and between said parties that the right and license heretofore enjoyed as aforesaid, by the second party, should at its request be re-

duced to writing and made perpetual and that said first party should thereupon and in consideration thereof, be entitled to and have a one-fourth interest in all and singular the property, rights and business of the second party and that such interest should not be required to contribute in any manner to the expense of the development of the business of the second party, nor to the payment of liabilities incurred on account thereof, and to that end should have one-fourth of its capital stock as the same should stand fixed at the date of such payment and one-fourth of each issue of any increase of such capital stock.

NOW, THEREFORE, it is agreed as follows:

1. The first party shall forthwith enter with the second party, into the license contract for extra-territorial connecting lines, Form 113 D, hereto annexed marked "A."

But the second party shall hold all telephones heretofore furnished the second party (schedule of which is hereto annexed marked "D") as the property of said The American Bell Telephone Company, under the said license contract so to be made with it, with like effect as if actually furnished thereunder, except that rental and royalty thereon shall begin at the date of such license contract.

2. The second party shall forthwith, upon the execution of said license contract, furnish and pay to said The American Bell Telephone Company or to its appointees one-fourth of its capital stock as the same shall stand fixed at the date of such payment, and

From time to time, if and whenever any issue of any increase of the capital stock of the second party shall be made, furnish and pay to said The American Bell Telephone Company or to its appointees one-fourth of such issue, all such stock so to be furnished and paid to said The American Bell Telephone Company or to its appointees to be lawfully issued, full paid and not subject to any assessment or contribution.

3. The second party shall assume and pay any and all taxes, whether municipal, county, state or other, which may be assessed on or on account of or by reason of the instruments leased or business done under said license contract, to whomsoever assessed.

4. The second party shall keep books and accounts of its business according to forms furnished by the first party, which books and accounts shall be open to inspection at all reasonable times by any authorized agent of the first party

and shall make reports to the first party embodying such information as, and in such form and at such times as it, the first party, may from time to time request.

IN WITNESS WHEREOF the parties hereto have caused their respective corporate seals to be hereto affixed and these presents to be signed in duplicate, by their respective officers thereto duly authorized.

THE AMERICAN BELL TELEPHONE COMPANY,
(Sd) G. V. L. By (Sd) JOHN E. HUDSON,
(Seal) *President.*
(Amn. Bell Tel. Co.)

AMERICAN TELEPHONE AND TELEGRAPH COMPANY,
(Seal) By (Sd) EDWD. J. HALL,
(Amn. Tel. & Tel. Co.) *Vice President.*
Attest:
(Sd) MELVILLE EGLESTON,
Secretary.

"A."

THIS AGREEMENT, Made this first day of January, A. D. 1894, by and between The American Bell Telephone Company, a corporation duly formed under the laws of Massachusetts, Lessor and Licensor, of the first part, and The American Telephone and Telegraph Company, a corporation duly formed under the laws of New York, lessee and licensee, of the second part,

WITNESSETH:

1. Said second party desires to obtain the rights reserved to the first party under its license contracts with its several Licensees (copies whereof have been furnished to the second party) within the territory covered by the several states and territories of the United States for connecting places within the territories of such licensees with places within the territories of other of such licensees to use telephones to be obtained from the Lessor and under lease and license from it, under its patent granted to Alexander Graham Bell, No. 186,787, dated January 30, 1877, and under other patents which it may hereafter own or have the right to use, applicable thereto; and also to avail itself of and enjoy the right of connecting with the exchange systems established within the United States, as provided and stipulated in favor of the Lessor in its exchange contracts for those systems (copies of which stipulations have been furnished to the Licensee, and the

terms of which it is to conform to so far as they relate to business to be done hereunder), and of connecting with exchange systems which may hereafter be established in exchange districts in the United States, under contracts to be made by the Lessor therefor, to contain stipulations substantially like those in the Lessor's Standard Form 109 C, a copy of which has been furnished to the Lessee, and wishes to use and allow others to use, said lines for personal communication between persons in the territories of different Licensees; now it is agreed:

2. Said second party shall by the establishment of such lines, so far as it is authorized so to do by this contract, satisfy all reasonable demands of the public therefor, and shall be diligent to increase the number of its said lines.

The rights hereby granted to the lessee shall be perpetual unless determined as hereinafter provided.

3. The Lessee may construct lines and may use such lines for telephonic personal communication between a customer in the territory of one such Licensee and a customer in the territory of another such Licensee. The Lessee shall not directly or indirectly connect its lines with any telephone or telegraph line or telephone exchange, except lines with which it has been by the Lessor authorized to connect; nor deliver messages to be forwarded to destination by telegraph to any telegraph company, except such as may be specially designated by the Lessor for that purpose, so far as it can lawfully control the same, or unless specially directed by a customer so to do (but it will not solicit such special direction nor receive and pay tolls over other lines unless compellable by law so to do). For the purpose of establishing telephonic personal communication between customers as aforesaid, the Lessee may have and exercise all the right to construct and operate telephone lines and maintain suitable offices and connect with exchange systems established or to be established, as aforesaid, which the Lessor has reserved and is or may be entitled to grant for extra-territorial connecting lines under licenses to exchanges made or to be made as aforesaid; but the Lessee shall connect with each local exchange and do its business so far as the same can conveniently be so done, with the customers thereof through said exchange, but such connection shall be made only with such exchanges or with said lines of exchanges as are constructed, equipped, maintained and operated in such manner and with such efficiency, as not to interfere with or impair the quality of the service

furnished by the second party. For the purpose of this contract an exchange district means a territory, not to cover more than a single town or city, or a circle of fifteen miles' radius measured from a central point, which the Licensor has included and covered or may hereafter include and cover in and by an exchange license.

4. The Licensor, at its general office or factory, will deliver to the Lessee, as called for, electric speaking telephones, made and to be used under its patents during the existence of the rights hereby granted and as herein set forth and permitted, and all telephones delivered to the Lessee during the continuance hereof shall be deemed to be furnished hereunder, unless otherwise specially designated by the Licensor. They will be of such character and pattern and bear such marks as the Lessor shall from time to time determine, but the Lessee may choose from among such standard patterns. Each of said telephones shall remain the property of the Licensor, and is hereby leased and the use of it is hereby licensed for the purposes herein declared for the term of one year from the day when rent and royalty begins to accrue on it, as herein provided; but the due payment thereof to the Licensor, and the due performance of the stipulations hereof during said year by the Lessee and those using the telephone under it, shall *ipso facto* operate to renew the lease and license for another year, and so on until the determination hereof. The Licensee shall pay to the Licensor seventy (70) per cent. of the telephone rental and royalty which shall be fixed from time to time by the Licensor (being a discount of thirty (30) per cent.) to commence on each instrument on the first day of the second calendar month after its shipment by the Licensor, to continue until the instrument shall be put into the possession of the Licensor, or prove to be destroyed, and to be paid in equal monthly payments in advance at the Licensor's office on the tenth day of each month up to the last day of the same month. Until otherwise fixed, the rates shall be as follows:

Battery transmitter, each instrument, per yr. $10.00.

Magneto-telephone, each instrument, per yr. $10.00.

Upon each instrument unlawfully detained from the Lessor the Lessee shall pay five dollars per month until satisfactory proof of its destruction be furnished, and five dollars for each lost or destroyed otherwise than by fire or inevitable accident, and shall also bear the expense of ordinary repairs; but said payments shall not confer any right to the instru-

ment, nor to its use, nor satisfy any other breach of covenant, nor impair the right of the Licensor, to obtain possession of any instrument or lines.

5. The right and license hereby granted is the right and license to use said telephones to carry on personal communication, upon their own business by and between customers and their employees personally present at instruments in the territories of different licensees above described, over circuits composed exclusively of said authorized lines owned by the Lessee and the lines (of the exchange or other) of Licensees of the first party; but the telephones furnished and lines constructed hereunder are not to be used for the transmission of general business messages, market quotations, or news for sale or publication, in competition with the business of any telegraph company, and the Lessee, so far as it can lawfully and properly prevent it, will not permit the same to be so used. The term "general business messages" is defined to mean all communications in behalf of other parties than those who directly communicate by the telephone by themselves or their servants or agents personally present, at the instruments, and no person engaged in the business of transmitting messages for other parties shall be authorized or knowingly allowed by the Lessee, its servants or agents, to transmit such messages through the telephone. The Lessor will not furnish or license telephones to any other party to establish such personal communication between persons in the territories of different Licensees, while the rights of the Lessee hereunder exist, except so far as the Lessor's existing contracts with the Western Union Telegraph Company, and with others, may require it so to do, or as it may see fit so to do under contracts hereafter to be made for branch lines and for private, club, social, and other lines, substantially as defined in its Standard Form No. 116 B, and except that the first party may as heretofore, authorize a Licensee to connect directly with any of its exchanges situated near its boundaries, persons in the contiguous territories of other Licensees, but the Lessee shall furnish sufficient general lines for general customers, and special lines for individuals or associate customers, between the territories of different Licensees, and for the purposes aforesaid, at prices which shall be reasonable under the circumstances hereunder.

6. The Lessor will license to be used with such telephone, the inventions in call bells, switches, switch-boards, and oth-

er apparatus needed for such telephone lines, which it can so license, upon such royalties as it may from time to time establish, not greater than those fixed for others under similar circumstances, but such call bells, switches, switchboards, and other apparatus shall be used only with the telephones licensed by the Lessor, and the Lessee agrees not to use them otherwise, nor to dispose of them to any one except to those so licensed, or to the licensed manufacturers of the Lessor. The Licensee may enjoy any rights of way and similar franchises to maintain said lines which the Lessor can permit it to use, when and so long as, in the judgment of the Lessor, it shall not interfere with the enjoyment thereof by the Lessor or its other grantees, and shall pay whatever may be due to third persons, if anything, rowing out of or in connection with such use by it. For the purpose of furnishing service at points not then reached directly by its lines but which may be reached wholly or in part over the lines of other Licensees of the first party, the second party will avail itself of the right to use the lines of such Licensees reserved to the first party in its, said first party's licenses therefor, and will pay to the Licensees whose lines are so used the compensation stipulated in such licenses, provided such lines so to be used are constructed, equipped, maintained and operated in such manner and with such efficiency as not to interfere with or impair the quality of the service furnished by the second party. In respect of all communications originating on its lines and which are to be forwarded over any other lines, the Lessee shall require the customer or subscriber to bind himself by and make every message subject to such contracts, stipulations and limitations of liability of such other lines as the Licensor may from time to time require, in such form as it may from time to time prescribe, and will hold the Lessor harmless from all loss or expense consequent upon its failure so to do.

7. The Lessee admits the validity of all patents relating to telephony and telephonic appliances, now or hereafter held by the Licensor, or under which it may hold licenses exclusive in their character and the validity of its title thereto, and will not dispute the same nor make, use, or be interested in any telephones or telephonic lines or business not licensed by the Licensor or its assigns.

8. The Lessee will pay to the exchanges established, or which may hereafter be established, and with which it shall connect as aforesaid, such sums as such exchanges are or shall

be entitled to receive under their exchange contracts, made or to be made, for making connections with extra-territorial lines. And the Lessee will also pay to the Lessor, in addition to said telephone rental and royalty, and in consideration of the further rights and privileges hereby granted, fifteen (15) per cent. of the Lessee's gross receipts from subscriptions and tolls. Said payments are to be made to the Lessor at its office on the tenth day of each month, upon all receipts up to the first day thereof. The Lessee shall keep full accounts of such receipts and payments, furnish copies thereof to the Licensor upon request, and exhibit its original accounts and vouches so far as may be proper to verify the same.

9. The lines to be built hereunder shall be sufficient and suitable for the purposes contemplated hereby.

10. The Lessee may place the telephones furnished hereunder in its own offices, for use, by general customers, as herein stated and limited, or may place them under subleases and licenses in connection with its lines, on the promises of subscribers or special customers for such uses. Such subleases and licenses shall, in such form as the Licensor shall from time to time approve, express the title of the Licensor to the telephone and the patents, the extent of the License hereby granted, the purposes for which the telephone may be used, that any other use of any telephone by any person, or non-payment of the rental and royalty to the Licensor, is an injury to and invasion of its rights as owner thereof and of the patent rights used therein and thereby, and entitling it to all rights and remedies in law and in equity, under the patent laws and as herein expressed otherwise, including the remedy by injunction against the person in possession thereof, and all others who have misused the same as aforesaid for any use not justified by a subsisting license, or for the violation of any other of its rights. It may also enforce against such sub-licensee all rights and pursue all remedies given by and under such sub-license, and may use the name of the Lessee for such purpose, or may require the Lessee, at his own expense, to enforce the term of such contracts.

11. If the Lessee shall fail to make any of the payments herein stipulated when due, or shall fail to keep any of the terms hereof, or of a contract preliminary hereto between the same parties dated January 1, 1894, and such default shall continue during a period of sixty days after written notice thereof from the Lessor, or shall become bankrupt or

insolvent, the Licensor may, if it shall so elect, by a written notice to the Lessee (or those in charge of any of its principal offices), terminate all rights granted by the licensor hereunder, and by itself or those designated by it for the purpose, by due process of law or by actual entry, may and shall be entitled to repossess itself of the rights and privileges herein granted, and thereafter use and enjoy the same; and especially may take possession of and remove said telephones, or sever the wires to which they are connected, and connect its own wires to said severed wires, telephones and apparatus, and use the same by itself and by those whom it may permit; or it may, so long as it shall see fit, leave in the enjoyment and use of the telephones any person in actual possession, and collect from him such sums as are or may become due for the use of the telephones, wires and appliances, used therewith, and for that purpose shall be entitled to and may take possession of all the lines, fixtures, apparatus, appliances and premises of the Lessee used for carrying on this business, and occupy and operate the same in connection with said telephones and other telephones connected or to be connected therewith, or connect such lines with offices of its own for that purpose. The Licensor shall have the like right upon or within three months after termination in any other manner of the rights of the licensee hereunder and may enforce this provision of an entry without being deemed guilty of any trespass, or by legal process, including an injunction to prevent any interference with the Licensor and others permitted by it in the use of said telephones, lines and apparatus. The property so taken and which does not belong to the Lessor or revert to it hereunder may be returned within three months from the taking, in which case the Lessor shall pay to the Lessee a reasonable compensation for the use thereof, or the Lessor may retain the same as its own property, and shall pay therefor a reasonable price, in no case exceeding the actual cost, within four months after the taking, and shall account to the Lessee for all sums collected which accrued before the Licensor became so entitled to possession, first deducting all expenses incident thereto, and all that may be due from the Lessee to it. The Lessor also reserves all its rights and remedies in law and in equity under the patent laws or otherwise, including the remedy by injunction against the Lessee or those claiming under it, for the use of any of its patented inventions or instruments not justified by a subsisting license hereunder, or for the violation of any other of its rights. The Lessor may also use the name of the Lessee

to protect its interests and enforce its rights hereunder, and the Lessee shall execute assignments in accordance herewith.

12. The territories of the several Licensees of the first party are defined for the purposes of this contract in the schedule hereto annexed marked "B," except that the counties or parts thereof therein marked "temporary" may be added to the contiguous territories of other licensees.

13. The first party has heretofore granted to several of its Licensees contracts for extra-territorial lines, each of which is either a through line, that is to say, a line connecting places within the territory of one such Licensee with places within the territory of another such Licensee, or connects at or near the boundary of the territory of one such Licensee with the lines of another such Licensee and makes therewith such a through line, some of which contracts are perpetual and some terminable upon notice, schedule of which contracts is hereto annexed marked "C." The rights granted by, or acquired under, said contracts, shall remain unaffected hereby; but as to such of said contracts as are temporary the first party will upon request of the second party give suitable notices of termination.

14. If in the opinion of the first party, it shall be expedient to build a through line from the territory of one such licensee into the territory of another such licensee, and the second party shall not, within two months from the receipt of notice from the first party of such opinion, elect to build said line and shall not within said time notify the first party of such election, the first party may permit one or both of said Licensees to build said line, and if built, it shall be covered by the first party's usual form of contract, for extra-territorial connecting lines terminable on six months' notice from the first party; but in respect of each such license the notice of termination to be given and provided by the preceding article, shall not be called for within two years from the date of such license.

15. This contract is personal to the Lessee herein named, and any assignment or attempt to assign the same or the lines established hereunder, or any or either of them, by act of the party or operation of law, without the written consent of the Licensor, shall be a violation hereof, and good ground for a cancellation hereof by the Licensor. The second party covenants that he will keep and observe all the stipulations herein contained on its part to be kept and performed. Whenever the Licensor grants to others the rights for ex-

changes or any other rights remaining to it, the stipulations hereof relating thereto shall be binding upon and inure to the benefit of such grantees, and the Licensor shall not be responsible for their acts or defaults. If the Licensor shall transfer to any party who shall agree to perform the stipulations thereof, its title to the telephones hereby leased, and the patent rights under which they are licensed, and its then existing rights hereunder, it is agreed that the provisions hereof inure to the benefit of and are binding upon such party in respect of all things done or to be done after such assignment, as if it were named a party, and that said The American Bell Telephone Company shall no longer be responsible hereunder.

IN WITNESS WHEREOF, The parties hereto have caused their respective corporate seals to be hereto affixed and these presents to be signed in their names and behalf by their officers thereto duly authorized.

(Signed) THE AMERICAN BELL TELEPHONE CO.,
By (Sd.) JOHN E. HUDSON,
President.

(Seal)
(Amn. Bell)
(Tel. Co.)

AMERICAN TELEPHONE AND TELEGRAPH CO.
By (Sd.) EDW'D J. HALL,
Vice-President.

(Seal)
(Amn. Tel. &)
(Tel. Co.)

Attest:
(Sd.) MELVILLE EGLESTON,
Secretary.

(Page (93)).

(40) The Chicago Company was incorporated January 14, 1881, under the laws of Illinois and the object for which it was formed is expressed in its articles of incorporation, as follows:

> "To manufacture telephones and all apparatus connected therewith and to construct and acquire by lease or otherwise, own and operate telephone and telegraph lines and offices, and to lease the same or any portion thereof, and to do a telephone and telegraph and district telephone business."

The Chicago company owns and operates and controls under licenses and agreements from the American Bell and the American Companies telephone lines, stations and exchanges in the Counties of Cook, Lake, McHenry, Du Page, Kendall, Grundy and Will in the State of Illinois, and Lake and Porter in the State of Indiana, and carries on a general intra-state and interstate telephone business over its lines extending through the territory aforesaid and in connection with lines of other telephone companies connected therewith, particularly the lines of the Union Company and the American Company reaching thereby all points in the United States and Canada served by the Bell System of telephones above described. Of the twenty-seven million ($27,000,000) dollars par value of the stock of the Chicago Company outstanding, $26,341,600 is owned by the American Company which last named company has from time to time since November, 1911, exchanged its stock at par for stock of the Chicago Company, and at all times since the organization of the Chicago Company, the American Company or the American Bell Company has owned a majority of the outstanding stock of the Chicago Company.

CITY'S EXHIBIT 51.

This Agreement, made this Twenty-ninth day of January, 1913, by and between the AMERICAN TELEPHONE AND TELEGRAPH COMPANY, a corporation organized and existing under the laws of the State of New York (hereinafter called the AMERICAN COMPANY), and the CHICAGO TELEPHONE COMPANY, a corporation organized and existing under the laws of the State of Illinois (hereinafter called the CHICAGO COMPANY),

WITNESSETH: That

Whereas, the American Company has adopted a Plan for Employees' Pensions, Disability Benefits and Insurance, dated October 8, 1912, and has established a fund to be administered under the Plan, and its associated or allied companies have adopted similar Plans and established funds to be administered thereunder, and

Whereas, it has been provided in said Plans that employees of either company may become entitled to pensions, disability benefits and insurance, payable out of the funds of the company in which they are employed at the time when they become

entitled to any pensions, disability benefits or insurance, irrespective of the fact whether the required term of employment has been wholly in the service of that company or partly in the service of that company and partly in the service of any of the other companies above described, or a Bell Company predecessor thereof, and that the Chicago Company may have recourse to the fund of the American Company in case its own fund is insufficient for the payment of the obligations imposed under its Plan, and

Whereas, the Plans adopted by the companies have provided that agreements may be made between the American Company and its associated or allied companies prescribing the terms and conditions under which liabilities under the Plans may be assumed and interchanged.

Now, Therefore, in consideration of the covenants and agreements herein contained and the pecuniary obligations mutually assumed hereunder, the parties hereto severally agree as follows:

The American Company agrees that in determining the term of employment of an employee under its Plan for Employees' Pensions, Disability Benefits and Insurance, such employment shall include continuous service, not only in the American Company, but in the American Company and the Chicago Company combined, or in the American Company, the Chicago Company, the associated or allied companies with which agreements have been made by the American Company for interchange of benefit obligations under similar plans, and any Bell Company predecessor of any such company, or any one or more of said companies; that it will, for the purpose of this agreement, recognize as an employee of an associated or allied company any employee of any company subsidiary thereto, allied therewith or a predecessor thereof, whose right to become eligible to pensions, disability benefits or insurance under the Plan of such associated or allied company has been conferred by appropriate action taken by such associated or allied company, and has been approved by the Employees' Benefit Fund Committee of the American Company; and that it will pay its employees who by such term of employment under its Plan become eligible to pensions, disability benefits or insurance, the amounts due them, their representatives or beneficiaries, out of its own fund without reimbursement from the Chicago Company on account of any period of service in

that Company, except such reimbursement as that Company may make in accordance with its agreement hereunder, by payments under like conditions to its own employees, their representatives or beneficiaries.

The American Company further agrees that it will provide in the contracts it shall make with its associated or allied companies, that such companies shall determine the terms of employment of their own employees entitling them to pensions, disability benefits and insurance under the Plans adopted by such companies as aforesaid, by combining periods of service in like manner as the American Company has herein agreed to combine them, and by recognizing as employees of any associated or allied company, employees in any company subsidiary thereto, allied therewith or a predecessor thereof, in the same manner and under the same conditions as the American Company has herein agreed to recognize them; and that such companies shall pay the amounts to which their employees, their representatives or beneficiaries, by such terms of employment, under Plans for Pensions, Disability Benefits and Insurance, adopted as aforesaid, may become entitled, without reimbursement from any associated or allied company on account of any period of service with such company, except such reimbursement as may be made under agreements with the American Company as to the determination of terms of employment and the obligations thereby incurred.

The American Company also agrees that it will maintain the Employees' Benefit Fund of Two Million Dollars ($2,000,000) which it has already established by adding thereto interest at the rate of four per cent (4%) per annum, upon unexpended balances, which shall be credited semi-annually to the fund, and by appropriating and adding thereto at the end of each fiscal year whatever sum may be required, not exceeding Five Hundred Thousand Dollars ($500,000), and will pay out of said fund, limited as aforesaid, to the Chicago Company, in case the fund established by that Company, the interest added thereto and the appropriations made for the fund, under its Plan for Employees' Pensions, Disability Benefits and Insurance, are insufficient to enable it to fulfill the obligations imposed by its Plan, such additional amount as that Company may require during any year to meet such obligations; provided that the Chicago Company complies with all the terms and conditions herein specified,

maintains its own fund as herein provided and continues to pay to the American Company annually four and one-half per cent (4½%) of its gross receipts under the agreement now existing between the two companies, or such sum as may be stipulated in any agreement which may be substituted therefor. The fact of the insufficiency of the fund of the Chicago Company, the interest added thereto and the appropriations made for it and the amount of such insufficiency shall be determined by the Committee administering the Employees' Benefit Fund of the American Company, who, as a prerequisite to such determination, shall be furnished such statements as to the management of the fund and as to additional amounts demanded from the American Company as the Committee of that Company may require.

In case the demands made upon the fund of the American Company by the Chicago Company and other associated or allied companies become so great as to prevent that Company from meeting all demands which may be made upon it under the Plans of the associated or allied companies, the amount to which the Chicago Company shall be entitled, under this agreement, shall be such precentage of the fund of the American Company as may be found by the Committee of that Company available so that all associated or allied companies may share equally in the benefits of the fund.

The Chicago Company, on its part, agrees that in determining the term of employment of an employee under its Plan for Employees' Pensions, Disability Benefits and Insurance, such employment shall include continuous service, not only in the Chicago Company, but in the Chicago Company, the American Company, the associated or allied companies with which agreements have been made by the American Company for interchange of benefit obligations under similar plans, and any Bell Company predecessor of any such company, or any one or more of said companies; that it will, for the purpose of this agreement, recognize as an employee of an associated or allied company any employee of any company subsidiary thereto, allied therewith or a predecessor thereof, whose right to become eligible to pensions, disability benefits or insurance under the Plan of such associated or allied company has been conferred by appropriate action taken by such associated or allied company, and has been approved by the Committee of the American Company; and that it will pay its employees, who by such term of employment under its

Plan shall become eligible to pensions, disability benefits or insurance, the amounts due them, their representatives or beneficiaries, out of its own fund, without reimbursement from the American Company or any associated or allied company on account of any period of service in either of said companies, except such reimbursement as may be made by the assumption of similar obligations by the American Company under this agreement and by the associated or allied companies under agreements with the American Company, as herein provided.

The Chicago Company agrees to maintain the Plan for Employees' Pensions, Disability Benefits and Insurance adopted by it on November 27, 1912, without any change therein except such as may be necessary or proper in order to conform to any change made in the Plan of the American Company, that any such change shall be subject to the approval of the Committee of the American Company and that in case any by-laws or rules of procedure are adopted by its Committee for the administration of its Plan, they shall also be subject to the approval of the Committee of the American Company.

The Chicago Company also agrees to add to its Employees' Benefit Fund of Four Hundred Thousand Dollars ($400,000) interest upon unexpended balances at the rate of four per cent (4%) per annum, which shall be credited semi-annually, and to appropriate and add to the Fund each year in order to maintain it at the sum of Four Hundred Thousand Dollars ($400,000) a percentage of its pay-roll not exceeding two per cent (2%), which shall be determined from year to year by the Committee appointed by the American Company to administer its Employees' Benefit Fund.

The Chicago Company also agrees that in case it shall become consolidated with another company having a similar Plan for employees' pensions, disability benefits and insurance, the funds of the companies shall likewise be consolidated.

In Witness Whereof, the American Telephone and Telegraph Company has caused these presents to be signed in its name and behalf by U. N. Bethell, its Senior Vice-President, and its corporate seal to be hereto affixed, attested by its Secretary, and Chicago Telephone Company has caused these presents to be signed in its name and behalf by B. E. Sunny,

its President, and its corporate seal to be hereto affixed, attested by its Secretary, the day and year first above written.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY,
By U. N. BETHELL,
Senior Vice-President.

Attest:
A. A. MARSTERS,
Secretary.

CHICAGO TELEPHONE COMPANY,
By B. E. SUNNY,
President.

Attest:
W. S. WARREN,
Secretary.
(Seal)

CITY'S EXHIBIT 52.

PLAN FOR EMPLOYEES' PENSIONS,

DISABILITY BENEFITS AND DEATH BENEFITS.

(In Effect January 1, 1913; Amended May 1. 1914;
Amended as to Section 5, Paragraph 2, July 1, 1920.)

This booklet describes the "Plan for Employees' Pensions, Disability Benefits and Death Benefits" of the

ILLINOIS BELL TELEPHONE COMPANY,

and the word "Company" in the text of the Plan on pages 5 to 20 should be read accordingly.

A similar Plan has been adopted by the American Telephone and Telegraph Company, its Associated Operating Companies in the United States and the Western Electric Company, Incorporated, and agreements for interchange of benefit obligations have been made as provided in Section 10 of the Plan.

The aggregate amount of the initial appropriations made by all companies of the Bell System for the purpose of establishing the "Employees' Benefit Funds" described in Section 3 of the Plan was $9,855,000. Each of the Companies has undertaken, in accordance with Section 11 of the Plan, to credit to its Fund interest at the rate of 4% per annum on the average unexpended balance and also, at the end of each year,

to make such additional appropriation as is required to restore the Fund to its original amount, subject to a limit of 2% of the Company's payroll, except in the case of the American Telephone and Telegraph Company in which case the limit is extended to $500,000.

The Plan described herein provides sickness benefits for only such employees as have been in the service two years or more. In the case of sickness of employees of less than two years' service, such practice as the Company may establish from time to time will be followed.

Communications with reference to the Plan may be addressed to Secretary of Employees' Benefit Fund Committee.

SUMMARY OF BENEFITS.

A brief summary of benefits to which employees may become entitled is given below. The full details and qualifying provisions are given in sections headed "Plan for Employees' Pensions, Disability Benefits and Death Benefits." (Pages 5-20.)

1. PENSIONS.

Retirement on pension is provided for employees coming under the classes listed below. Employees in Class A may be retired on pension either at their own request or at the discretion of the Committee. Employees in Classes B and C may be retired on pension only at the discretion of the Committee and with the approval of the President or Vice-President.

Class A.

Employees whose age is 60 years or more (females 55 or more) and whose term of employment has been 20 years or more.

Class B.

Employees whose age is 55 to 59 years (females 50 to 54) and whose term of employment has been 25 years or more.

Class C.

Employees whose age is less than 55 years (females less than 50) and whose term of employment has been 30 years or more.

Class D. (*Disability Pension.*)

Any employee whose term of employment has been 15 years or more and who becomes totally disabled by rea-

son of sickness may, at the discretion of the Committee and with the approval of the President or Vice-President, be granted a disability pension, which shall continue for such period only as the Committee may decide.

The amount of the annual pension in any of the above cases is 1% of the average annual pay for 10 years, multiplied by the number of years in the employee's term of employment.

Example: An employee whose term of employment at time of retirement has been thirty years and whose average pay for ten years has been $1,500 a year, will receive an annual pension equal to 30% of $1,500, or $450, payable in monthly amounts of $37.50.

NOTE: The minimum pension will be $30 a month, but this is not to apply to disability pensions granted to employees of less than 20 years' service or to pensions granted to "part time" employees.

2. Accident Disability Benefits.

Total Disability—Full pay 13 weeks, half pay for remainder of disability. Maximum benefits to be $20 a week after six years of benefit payments.

Partial Disability—For first 13 weeks, 100% of loss in earning capacity; for remainder of disability, 50% of loss in earning capacity. Period of payments not to exceed six years in all.

3 Sickness Disability Benefits.

These benefits begin on the eighth calendar day of absence on account of sickness and are as follows:

(a) For employees whose term of employment has been 10 years or more—

Full pay 13 weeks; half pay 39 weeks.

(b) For employees whose term of employment has been 5 years or more, but less than 10 years—

Full pay 13 weeks; half pay 13 weeks.

(c) For employees whose term of employment has been 2 years or more, but less than 5 years—

Full pay 4 weeks; half pay 9 weeks.

Note: Benefits are not provided in the Plan for sickness of employees of less than two years' service. In such cases such practice as the Company may establish from time to time will be followed.

4. Death Benefits.

These are payable only to wife (or husband) or dependent relatives of deceased employee and are:

(a) Sickness Death Benefits.

If employee's term of employment has been 10 years or more:

One year's pay, not to exceed $2,000.

If employee's term of employment has been 5 years or more, but less than 10 years:

Six months' pay, not to exceed $2,000.

(b) Accident Death Benefits.

Three years' pay, not to exceed $5,000, and the necessary expenses of burial, not to exceed $150.

Applications for Benefits.

Applications for benefits shall follow the approved instructions of the Company. In default of such instructions applicants should promptly communicate with the Secretary of the Employees' Benefit Fund Committee.

3

Retirement Age.

By action of the Directors of the Company a rule has been adopted which requires that on July 1, 1930 every officer or other employee who at that time is 65 years of age or over, shall retire from active service, and that thereafter every officer or other employee becoming 65 years of age shall retire at the end of the month in which that age is reached. Provision is made, however, that by specific action of the Directors the operation of this rule may be delayed from year to year with respect to any employee who is performing such services for the Company that continuation in active employment is deemed for the best interests of the service. Pensions will be voted to those persons retired by the operation of this rule who are eligible to pensions under the Benefit Plan at the date of retirement.

The above rule will supersede as of July 1, 1930 the existing rule providing for retirement at 70 years of age.

Employees' Record of Service.

Each employee on entering the service of the Company will be given a copy of this pamphlet and, at that time or at such later time as is the practice of the Company, will be required to

furnish for the files of the Committee, on a form supplied for that purpose, information regarding his previous service and the name of his beneficiary in case of death.

LEAVE OF ABSENCE, LAY-OFF AND TRANSFER.

Attention is called to the provisions in regard to absences from the service contained in Paragraphs 5, 6 and 7 of Section 9 of the Plan. In order that all employees may be treated fairly, the Company has established routines which must be observed if the continuity of the employee's service is to be preserved in case of transfer from one Company to another and in case of any absence from the service without pay. *Failure on the part of the employee to inform himself of these routines and to observe them may result in loss of credit for previous service.* Employees may obtain information regarding the routines from their immediate superiors or from the Secretary of the Employees' Benefit Fund Committee.

4

PLANS FOR EMPLOYEES' PENSIONS,

DISABILITY BENEFITS AND DEATH BENEFITS.

(In effect January 1, 1913; Amended May 1, 1914; Amended as to Section 5, Paragraph 2, July 1, 1920)

SECTION 1. OBJECT.

The Company undertakes in accordance with these Regulations, to establish, maintain and administer a Fund to be known as the "Employees' Benefit Fund" for the payment of definite amounts to its employees when they are disabled by accident or sickness or when they are retired from service, or, in the event of death, to their dependent relatives.

SECTION 2. DEFINITIONS.

1) In these Regulations the word "Company" shall mean the Company or Companies named on the first page or its or their successors.

2) "President" and "Board of Directors" or "Board" shall mean the President and Board of Directors respectively of the Company.

3) The word "Committee" shall mean the persons appointed by the Board to administer the Employees' Benefit Fund in accordance with approved Regulations.

4) The word "Employees" shall mean those persons who

receive a regular and stated compensation from the Company other than a pension or retainer.

5) The word "Fund" shall mean the "Employees' Benefit Fund" as set forth in the first paragraph of these Regulations.

6) The expression "Term of employment" shall mean period of continuous employment in the service of the Company, or of the Company, the American Telephone and Telegraph Company, the Associated and Allied Companies with which agreements have been made by the American Company for interchange of benefit obligations and any Bell Company predecessor of any of said companies, or in the service of any one or more of said companies. Service in companies subsidiary to, allied with or predecessors of any one of the aforementioned companies will be considered, in determining "Term of employment," as service in such aforementioned company, in all cases authorized by appropriate action on the

part of such company and approved by the Employees' Benefit Fund Committee of the American Company.

SECTION 3. THE FUND.

1) The Company has made an appropriation for the establishment of the Fund and agrees to make further appropriations as provided in Section 11.

2) The Company shall be the custodian of the Fund which shall draw interest at the rate of 4% per annum on the average balance and be credited therewith semi-annually. The average balance shall be determined by using the balances to the credit of the Fund at the first of each month.

3) The Company guarantees the disbursement of the Fund in accordance with these Regulations.

4) An audit of the receipts and disbursements of the Fund shall be made at the end of each fiscal year and a report of such audit shall be published to the employees.

SECTION 4. COMMITTEE.

1) There shall be a Committee of five (5) appointed by the Board to serve during its pleasure, which Committee shall be called the Employees' Benefit Fund Committee, or the Committee. This Committee shall be charged with the administration of the Plan and Fund hereby established.

2) The Committee shall have the specific powers elsewhere herein granted to it and shall have each such other powers as

may be necessary in order to enable it to administer the Fund in accordance with these Regulations.

3) It shall determine conclusively for all parties all questions arising in the administration of the Plan and the Fund.

4) It shall be empowered to draw from the Company out of the Fund for disbursement according to these Regulations.

5) It shall adopt such By-Laws and rules of procedure as it may find necessary, subject to the provisions of Section 10 and the approval of the President.

6) It shall be empowered to employ a Secretary and such other assistants as may be required in the administration of the Plan and Fund.

7) The expenses of the Committee in administering the Fund shall be borne by the Company.

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SECTION 5. PENSIONS.

1) On and after January 1, 1913:

a) All male employees who have reached the age of sixty years and whose term of employment has been twenty or more years and all female employees who have reached the age of fifty-five years and whose term of employment has been twenty or more years may, at their own request, or at the discretion of the Committee, be retired from active service and become eligible to pensions.

b) Any employee whose term of employment has been thirty years or more, or any male employee who has reached the age of fifty-five and whose term of employment has been twenty-five or more years, or any female employee who has reached the age of fifty years and whose term of employment has been twenty-five or more years may, at the discretion of the Committee and with the approval of the President or of a Vice-President designated by the President, be retired from active service and granted a pension.

c) At the discretion of the Committee and with the approval of the President or of a Vice-President designated by the President, any employee who has become totally disabled as a result of sickness or of injury, other than by accidental injury, arising out of and in the course of employment by the Company, and whose term of employment has been fifteen years or more, may be retired from active service and granted a pension. If a pension

is granted it shall be for such period as the Committee may determine, and if at any time during such period the employee recovers sufficiently to resume active service, the pension may be discontinued by action of the Committee. If the employee re-enters the service of the Company at the time such pension is discontinued he shall thereupon be eligible to benefits under these Regulations, and the period of absence on pension shall be considered as a leave of absence and not as a break in the continuity of the employee's service.

2) The annual pension allowance for each employee retired with a pension on account of age, length of service or disability shall be as follows:

For each year of his term of employment, one per centum (1%) of the average annual pay during the ten years next preceding retirement, provided, however, that the Committee may, at its discretion, base such pension upon the average annual pay of the ten consecutive years of service during which the retired employee was paid the highest rate of wages. The miniumum pension shall be Thirty Dollars ($30) per month, provided, however, that at the discretion of the Committee the pension al-

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lowance may be less than Thirty Dollars ($30) per month, but not less than the allowance computed as aforesaid, in the case of pensions granted under Paragraph 1 (c) of this Section to employees of less than twenty years' service, and in cases in which, in the opinion of the Committee, the days or hours constituting the employee's normal service have not been adequate to constitute full time service, during the number of years required to establish eligibility to pension in the class under which the employee is retired. (*As amended, effective July 1, 1920.*)

3) Pensions shall be payable monthly or at such shorter periods as the Committee may determine in each case.

4) Pensions granted to employees retired on account of age or length of service shall continue from date of retirement to death of pensioner, but pensions granted on account of disability, as provided in Paragraph 1 (c) of this Section, shall continue for such period only as the Committee may determine in each case from time to time. Pensions granted under any of the conditions described in these Regulations may, in the discretion of the Committee, be continued to de-

pendent relatives for a period which shall not extend beyond the end of the twelfth calendar month following the death of the pensioner, provided, however, that the total amount paid to all such dependent relatives shall not exceed Two Thousand Dollars ($2,000) in any one case.

5) If any retired employee shall engage in anything which, in the judgment of the Committee is prejudicial to the interests of the Company, the payment of a pension to such retired employee may be suspended during such period as he shall continue so engaged. Regular employment under a salary with this Company or with any company with which arrangements for interchange of benefit obligations, as described in Section 10 of these Regulations, have been made directly or indirectly, shall suspend the right of a retired employee to pension payments during the period he continues in such employment.

6) The Committee shall furnish quarterly to the President a list of all employees qualified to receive pensions.

7) The Committee, on January 1, 1913, or as soon thereafter as possible, shall notify all employees who are then qualified for pensions of that qualification and thereafter shall notify employees qualified to be pensioned at their own request, as they become qualified.

SECTION 6. ACCIDENT DISABILITY BENEFITS.

1) All employees of the Company on January 1, 1913, and thereafter shall be qualified to receive payments under these Regulations on account of physical disability to work by reason of accidental injury (not including the accidental injuries specified in Paragraphs 14 and 15 of Section 9 of these Regulations) arising out of and in the course of employment by the

Company. Such payments are hereinafter referred to as Accident Disability Benefits.

2) Accident Disability Benefits shall be as follows:

a) Total Disability—Full pay for any period of total disability during the first thirteen weeks of disability, and half pay for any period of total disability after the first thirteen weeks of disability, provided, however, that after the expiration of six years of disability payments, the benefits shall not exceed Twenty Dollars ($20) a week.

b) Partial Disability—For any period of partial disability during the first thirteen weeks of disability, 100%

of the difference between full pay at time of injury and wages which, in the judgment of the Committee, the employee is capable of earning; for any period of partial disability after the first thirteen weeks of disability, 50% of difference between full pay at time of injury and wages which, in the judgment of the Committee, employee is capable of earning, provided, however, that no payments for partial disability shall be made after the expiration of six years of disability payments.

"Full pay" and "half pay" for the purposes of this paragraph shall be based on the number of hours per week commonly regarded as constituting full time service, not including overtime, and shall be computed at the employee's rate of pay at the time the disability began.

3) If after a period of total disability the disability becomes partial or after a period of partial disability the disability becomes total, the amount of the benefits shall be changed accordingly.

4) In ascertaining the period during which Accident Disability Benefits shall be paid, the period of disability shall be taken as commencing upon the first day on which, because of disability, a full day's wages is not paid. Successive periods of disability from accident shall be counted together if from the same accident and separately if from different accidents.

5) Accidental injuries shall be considered as arising out of and in the course of employment only where the injury has resulted solely from accident during and in direct connection with the performance of duties in the service of the Company to which the employee is assigned or which he is directed to perform by proper authority or in voluntarily protecting the Company's property or interests and there must be a clear and well established history of the cause and circumstances of injury accidentally inflicted and they must be sufficient to produce the alleged injury and there must be satisfactory evidence that such injury renders the employee unable to perform his duty in the service of the Company.

6) In case of accidental injury to an employee arising out

of and in the course of employment by the Company, resulting in permanent loss of a bodily member or loss of its use, special benefits, in lieu of all other benefits on account of such injury, may be awarded by the Committee, provided, however,

that such special benefits shall not exceed the payment hereinafter authorized to be paid in case of death from accidental injury, except by specific authority from the Board.

7) In case of accidental injury to any employee arising out of and in the course of employment by the Company, the necessary expenses for "first aid" may, on approval of the Committee, be charged to the Fund. In addition the Committee will pay for necessary surgical treatment, but no employee shall have authority to contract any bills against the Company or the Committee and nothing herein shall be held to mean or imply that the Committee will be responsible for such bills as an employee may contract or his surgeon may charge. Bills for surgical treatment must be itemized before they will be considered by the Committee. The decision as to whether in any case surgical treatment was necessary and as to what constitutes surgical treatment shall rest with the Committee. At its discretion the Committee may authorize payment from the Fund of other expenses necessary for the proper care and treatment of the employee, during such period as the Committee may determine.

SECTION 7. SICKNESS DISABILITY BENEFITS.

1) All employees of the Company on January 1, 1913, or thereafter shall, after a term of employment of 2 years, be qualified to receive payments under these Regulations on account of physical disability to work by reason of sickness. Such payments are hereinafter referred to as Sickness Disability Benefits. Such payments shall terminate when disability ceases and shall in no case extend beyond the periods hereinafter mentioned. For the purposes of these Regulations, sickness shall include injury other than accidental injury arising out of and in the course of employment by the Company. This Section is subject, however, to the exceptions stated in Paragraph 14 of Section 9 of these Regulations.

2) Sickness Disability Benefits shall be as follows:

a) If term of employment has been 10 years or more—full pay 13 weeks; half pay 39 weeks.

b) If term of employment has been 5 to 10 years—full pay 13 weeks; half pay 13 weeks.

c) If term of employment has been 2 to 5 years—full pay 4 weeks; half pay 9 weeks.

"Full pay" and "half pay" for the purposes of this paragraph shall be based on the number of hours per week constituting the employee's normal service under his contract

of hiring, not including overtime, and shall be computed at the employee's rate of pay at the time the disability began, provided, however, that the benefits shall at no time exceed the pay which the employee would receive, based on his rate of pay and the general schedule of hours per week constituting a full week's service at the time the disability began.

3) Sickness disability benefits shall begin on the eighth calendar day of absence on account of disability, provided, however, that if an employee has received sickness disability benefits for any period and is again absent on account of sickness within two weeks after the termination of such period, any benefits on account of such further sickness shall begin on the first day of absence instead of on the eighth day.

4) Successive periods of sickness disability shall be counted together as one period on computing the period during which the employee shall be entitled to benefits, except that any sickness occurring after an employee has been continuously engaged in the performance of duty for thirteen weeks shall be considered as a new sickness and not as part of any disability which preceded such period of thirteen weeks.

5) Employees shall not be entitled to receive sickness disability benefits for time for which any wages are paid them by the Company.

SECTION 8. DEATH BENEFITS.

1) In the event of the death of any employee, resulting from accidental injury on or after January 1, 1913, arising out of and in the course of employment by the Company, there shall be payable to the employee's beneficiaries, as provided in Paragraph 3 of this Section (subject, however, to the conditions elsewhere imposed in these Regulations) a Death Benefit which shall equal three years' wages, as hereinafter in this Section defined, but which shall in no case exceed Five Thousand Dollars ($5,000). In addition to the Death Benefit, the necessary expenses of the burial of the deceased employee, not exceeding One Hundred and Fifty Dollars ($150), shall be paid from the Fund.

2) In the event of the death of any employee, on or after January 1, 1913, resulting from sickness as defined in Paragraph 1 of Section 7 of these Regulations, if the employee's term of employment has been five years of more there shall be payable to the employee's beneficiaries, as provided in Paragraph 3 of this Section (subject, however, to the condi-

tions elsewhere imposed in these Regulations), a Death Benefit, the amount of which shall be:

a) If employee's term of employment has been 5 to 10 years, six months' wages as hereinafter in this Section defined.

b) If employee's term of employment has been ten years or more, one year's wages as hereinafter in this Section defined.

c) The maximum Death Benefit in any such case shall be Two Thousand Dollars ($2,000).

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3) The Death Benefit, in case of an employee's death by either accident or sickness, shall be paid only to the wife (or husband) or dependent relatives of the employee and such payment shall be made in the following order; provided, however, that upon written application of an employee, and good cause shown, the Committee may authorize a change in such order of payment, but no persons other than the beneficiaries herein designated shall receive payment on account of such benefit:

First: To the wife (or husband) of the employee.

Second: If there be no wife (or husband) of such employee living at the employee's death, then to such child or children of the employee, and such issue of any deceased child, as were dependent upon such deceased employee for their support at the time of his or her death, in equal shares, such issue of said deceased child, if any, to take equally among them the share said deceased child would have taken if living and dependent.

Third: If there be no children or issue of deceased children dependent upon the employee as aforesaid, then among such other relatives, if any, as were dependent upon the deceased employee for support at the time of his death, and in such proportions as the Committee may decide. If any of such other relatives were only partially dependent upon the deceased employee for support, the death benefit payable to such partially dependent relatives shall be such part of the total death benefits as may be determined by the Committee to be proportionate to the degree of dependence, provided, however, that any relative to whose support the deceased employee was at the time of his death, regularly contributing an amount equal to 20% or more of his wages, such contribution be-

ing necessary for the support of such relative, shall be considered to have been wholly dependent upon the deceased employee.

Fourth: If there be no such relative dependent as aforesaid living at such employee's death, the benefit shall lapse, and the amount thereof shall remain as part of the Employees' Benefit Fund, but so much thereof as may be required to defray the necessary expenses incident to the death of the employee and the disability immediately preceding, together with the necessary expenses, not exceeding, however, One Hundred and Fifty Dollars ($150) of his burial, shall be paid from the Employees' Benefit Fund. In case notice in writing of the existence of such wife, husband, child, issue of a child, or dependent relative shall not be served on the Committee within one year after such employee's death, it shall be treated as conclusive that there are no such persons in existence.

4) All claims for death benefits, to be valid, must be made in writing within one year from the date of the death on which the claim is based.

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5) Claims for death benefits will be payable within thirty days after the required evidence of their validity is furnished.

6) A part of a death benefit, not exceeding Two Hundred Dollars ($200), may be paid before the final settlement, to meet urgent expenses incident to the death and preceding disability of an employee, to be deducted from the total amount upon final payment.

7) If any of the persons to whom the death benefit is payable are incompetent to give authority for such payments or cannot be found, or are in a foreign country, or for other reasons cannot be conveniently communicated with, the Committee may make such payments, as a part of the death benefit, as in its judgment may be reasonable for the proper burial of the deceased employee and the payment of necessary expenses incident to his death and disability immediately preceding.

8) If an employee dies during disability from accident or sickness, the death benefit which may be payable shall not be

subject to deduction of previous payments of disability benefits.

9) Death benefits shall not be payable in the case of any person who dies after he has ceased to be an employee of the Company, unless such person became disabled by reason of accident or sickness while an employee and continued disabled, until death, to such a degree as to be unable to engage in any gainful occupation. In such cases Death Benefits shall be payable provided the employee has not been pensioned and provided the Committee has been furnished, from time to time, such proof of continued disability as it may require and provided the Committee has been permitted to make or have made, by a physician, such examination of the disabled person as it may deem necessary in order to ascertain his condition.

10) "Wages" for the purposes of this Section shall mean wages for full time service (not including overtime), computed at the employee's rate of pay at the date of death, provided, however, that if the employee normally serves the Company on less than a full time basis, benefits in case of death from sickness shall be computed on the basis of the time constituting the employee's normal service under his contract of hiring.

SECTION 9. GENERAL PROVISIONS.

1) Neither the action of the Board of Directors in establishing this plan for employees' pensions, disability benefits and death benefits, nor any action hereafter taken by the Board or the Committee shall be construed as giving to any officer, agent or employee a right to be retained in the service of the Company or any right or claim to any pension or other benefit or allowance after discharge from the service of the Company, unless the right to such pension or benefit has accrued prior to such discharge.

2) Assignment of pensions or other benefits under these Regulations will not be permitted or recognized.

3) Pensions or disability benefits may be suspended or terminated, in the discretion of the Committee, in cases of gross misconduct or of any conduct prejudicial to the interests of the Company.

4) In all questions relating to the term of employment and rates of pay of employees, the decision of the Committee, based upon these Regulations and upon the records of the

Company, shall be final, provided, however, that as to service prior to June 1, 1914, the Committee shall have discretion to base its decisions upon the general intent of these Regulations and upon such information as may be obtainable from any source. As to service on or after June 1, 1914, this discretion shall not exist and the Committee shall base its decisions strictly upon the facts in the case as shown by the records of the Company.

5) Any absence from the service without pay, other than absence during a period of disability benefits, or leave of absence or temporary lay-offs as defined in Paragraphs 6 and 7 of this Section, shall be considered as a break in the continuity of service unless the Board of Directors specifically authorizes the Committee to consider such absence as a leave of absence, and if any person is re-employed after such a break in the continuity of his service, his term of employment shall be reckoned from the date of such re-employment.

6) Leave of absence shall not constitute a break in the continuity of service, but in the case of any such absence prior to June 1, 1914, which was of more than six months' duration, the period of absence shall be deducted in computing term of employment. On and after June 1, 1914, leave of absence, for the purposes of these Regulations, shall mean leave formally granted in conformity with the rules of the Company, as adopted from time to time, and, except in the case of leave granted by the Board of Directors as provided in Paragraph 5 of this Section and leave on account of continued disability following the expiration of a period of disability benefits, such leave must be obtained at or before the time the absence begins. Leave of absence for any period in excess of one month shall not be effective unless approved in writing by the Committee, and in any case in which such approval is given, the Committee shall indicate whether or not the period of absence is to be deducted in computing term of employment and whether during the absence the employee shall be eligible to benefits under these Regulations. Absence following the expiration of a period of disability benefits shall be considered as a break in the continuity of service unless the employee is granted a leave of absence, provided, however, that in its discretion, the Committee may consider any such absence as a leave of absence, if satisfactory

is furnished that the disability was continuous during the entire period of absence.

7) Temporary lay-off on account of reduction of force shall not be considered as a break in the continuity of service, but when the period of absence from such cause exceeds six months in any twelve consecutive months, the entire period of the absence shall be deducted in computing term of employment, and all subsequent periods of lay-off shall be so deducted until the employee shall have been continuously engaged in the performance of duty for a period of twelve consecutive months. After June 1, 1914, a period of lay-off shall not be considered as temporary unless the employee is re-employed within such period as the rules of the Company, as adopted from time to time, may require, not in any case exceeding two years. If the employee is not thus re-employed, the continuity of his service shall be deemed to have been broken. No benefits under these Regulations shall be payable during a period of lay-off.

8) Every employee who shall be absent from duty on account of sickness or injury must at once notify his immediate superior, and the employee shall not be entitled to benefits for time previous to such notice, unless delay shall be shown to have been unavoidable and satisfactory evidence of disability is furnished.

9) All claims for disability benefits, to be valid, must be made within sixty days from the date of accident or from the first day of absence on account of sickness.

10) Disabled employees wishing to leave home shall obtain from the Committee written approval of absence for a specified time and furnish it satisfactory proof of disability while absent, otherwise no benefits shall be paid for such period of absence.

11) It shall be the duty of disabled employees, when their condition and location do not prevent, to call on the Committee or the Committee's representative at such times as the Committee may require.

12) A disabled employee shall not be entitled to benefits if he declines to permit the Committee to make or have made by a physician, from time to time, such examination as the Committee may deem necessary in order to ascertain the employee's condition, or if he fails to give proper information respecting his condition, or if he prevents the necessary examination by absenting himself from home without arranging with the Committee, or giving satisfactory reasons for not doing so and furnishing the necessary evidence, or if he fails to comply with notice to meet the Committee, at its offices

or elsewhere, when his condition and location permit of his doing so.

13) Disabled employees must take proper care of themselves and have proper treatment. Benefits will be discontinued to employees who refuse or neglect to follow the recommendations of the Committee.

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14) In case of disability or death directly or indirectly due to intoxication or to the use of alcoholic liquors as a beverage or to the use of stimulants or narcotics or to unlawful acts or immoralities or to fighting, unless in self-defense against unprovoked assaults, or to other encounter, such as wrestling or scuffling, or to injury received in any brawl or in any liquor saloon, gambling house or other disreputable resort, or to the wilful intent of the employee to injure himself or another, or to venereal disease, no right to benefits under these Regulations shall exist except at the discretion of the Committee.

15) Death or disability resulting from infection of a cut, abrasion, scratch, puncture, or other wound not immediately disabling and not reported at the time of the occurrence causing the injury, or from sunstroke or frostbite, shall not be classed as due to accident, except at the discretion of the Committee.

16) Benefits and other claims upon the Fund shall be paid out in conformity with the financial methods of the Company and on orders of or bills prepared by the Committee or such other persons as may be designated by the Committee.

17) Disability benefits will ordinarily be paid at the same intervals of time as would govern the payment of wages to the employee if he were in the performance of duty, but at the discretion of the Committee benefits on account of continued disability may be paid monthly and on account of disability for short periods when the amounts are ascertained.

18) In case of any grave injury or chronic sickness, if the employee requests that a lump sum be paid in full settlement of all claims against the Employees' Benefit Fund and against the Company on account of such injury or sickness, the Committee may, in its discretion, make full and final settlement with the employee by commuting the benefit payments into a single lump sum payment, which payment shall be the present value computed on a fair basis, of the benefits to which the

employee would become entitled during such period as his disability may reasonably be expected to continue.

19) Disability benefits remaining unpaid at the death of an employee shall be payable to the person or persons entitled to receive the death benefit, and in like proportions.

20) Benefits payable to an employee unable to execute a proper receipt may be paid to a relative or other proper person, selected by the Committee, to use for the benefit of the employee and the receipt of such person shall be a sufficient discharge.

21) After an employee has received the maximum Sickness Disability Benefits herein provided for an employee of his term of employment, he shall not be eligible to further benefits on account of sickness until he shall have performed his duties as an employee of the Company for a continuous

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period of thirteen weeks. If an employee who has received Sickness Disability Benefits shall subsequently become disabled by reason of accidental injury arising out of and in the course of employment by the Company, or if an employee who has received Accident Disability Benefits shall subsequently become disabled by reason of sickness, the period during which benefits are payable on account of such subsequent disability shall not be affected by the preceding period of disability.

22) Benefits shall not be payable for both accident and sickness at the same time to the same person.

23) Granting a pension to an employee or retiring him from employment without a pension during a period of disability benefits shall not terminate or decrease his disability benefits. Granting a pension during a period of disability benefits, however, shall not entitle the employee to any payments on account of the pension, while the disability benefits continue, unless the amount of the pension is greater than the amount of the disability benefits, in which case only such amount shall be paid on account of the pension as may be necessary to make the total amount paid to such employee on account of the disability benefits and the pension equal to the amount he would have received if the pension alone had been paid.

24) "Rate of Pay" as used in these Regulations shall mean the time rate at which the employee is entitled to receive payment for services under the contract of hiring, pro-

vided, however, that if the employee's compensation is ordinarily computed on other than a time basis, the employee's average compensation (not including compensation for overtime) for so much of the preceding three months as he has been in the service of the Company, may be taken as determining the rate of pay, provided the rate thus computed is not less than the employee's time rate.

25) If an employee of this Company is an employee also of one or more other companies which have adopted plans for employees' pensions, disability benefits and death benefits, similar to that herein described and which have entered into arrangements with this Company, directly or indirectly, for an interchange of the benefit obligations to which the companies may be subject under such plans, any pension, disability benefits or death benefit to which such employee or his beneficiaries may become entitled under the plans shall be computed on the basis of the total combined pay which the employee is receiving from all such companies and, except in the case of injury or death due to accident arising out of and in the course of employment by any of such companies, shall be prorated among the companies on the basis of the pay the employee was receiving from each company, and this Com-

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pany shall only pay its share thus determined. Any maximum or minimum amounts fixed by these Regulations for pensions, disability benefits or death benefits shall apply to the total amount payable by all companies and not to the portion payable by this Company.

26) In case of accident resulting in injury to or death of an employee which entitles such employee or his beneficiaries to benefits under these Regulations, he or they may elect to accept such benefits or to prosecute such claims at law as he or they may have against the Company. If election is made to accept the benefits, such election shall be in writing and shall release the Company from all claims and demands which the employee or his beneficiaries may have against it, otherwise than under these Regulations, on account of such accident. If any persons other than the beneficiaries under these Regulations might legally assert claims against the Company on account of the death of the employee, no part of the death benefit under these Regulations shall be due or payable until there have also been delivered to the Committee good and sufficient releases of all claims, arising from or growing out

of the death of the employee, which such other persons might legally assert against the Company. The Committee, in its discretion, may require that the elections and releases above described shall release any other company, connected with the accident, with which arrangements have been made, directly or indirectly, for interchange of benefit obligations, as described in Section 10 of these Regulations. The right of the employee to accident disability benefits under these Regulations shall lapse if election to accept such benefits, as above provided, is not made within sixty days after injury, or within such greater time as the Committee shall, by resolution duly entered on its records, fix for the making of such election.

27) Should claim other than under these Regulations be presented or suit brought against the Company or against any other company with which arrangements have been made, directly or indirectly, for interchange of benefit obligations, as described in Section 10 of these Regulations, for damages on account of injury or death of an employee, nothing shall be payable under these Regulations on account of such injury or death except as provided in Paragraph 28 of this Section; provided, however, that the Committee may, in its discretion and upon such terms as it may prescribe, waive this provision if such claims be withdrawn or if such suit be discontinued.

28) In case any judgment is recovered against the Company or any settlement is made of any claim or suit on account of the injury or death of an employee, all or part of the sum paid in settlement or to satisfy the judgment shall, on approval of the Committee, be charged to the Fund, provided, however, that the entire amount charged to the Fund

on account of the injury or death of any employee shall not exceed the sum which would have been charged to the Fund if payments on account of the injury or death had been made as disability or death benefits under these Regulations. If the amount payable under these Regulations is greater than the amount paid as aforesaid, the difference between the two amounts may, in the discretion of the Committee, be distributed in accordance with these Regulations, except that no party to any such suit against the Company shall be entitled to any portion thereof.

29) In case any benefit or pension shall be payable under the laws now in force or hereafter enacted of any State or

County to any employee of the Company or his beneficiaries under such laws, the excess only, if any, of the amount prescribed in these Regulations above the amount of such benefit or pension prescribed by law shall be the benefit or pension payable under these Regulations. In those cases where because of differences in the beneficiaries, or differences in the time or methods of payment, or otherwise, whether there is such excess or not is not ascertainable by mere comparison but adjustments are necessary, the Committee in its discretion is authorized to determine whether or not in fact any such excess exists, and in case of such excess, to make the adjustments necessary to carry out in a fair and equitable manner the spirit of the provision for the payment of such excess. The amounts payable by the Company under any law as aforesaid, whether paid directly to the employee or his beneficiaries, or to any other persons, or to any company, commission or State, to provide for the payment of such benefits or pensions shall, on approval of the Committee, be chargeable to the Fund.

SECTION 10. INTERCHANGE OF BENEFIT OBLIGATIONS.

1) Agreements have been or may be made between the American Telephone and Telegraph Company and its Associated and Allied Companies, for an interchange of the benefit obligations to which such Companies may be subject under plans for employees' pensions, disability benefits and death benefits similar to that herein adopted. The general provisions of such agreements will be:

a) That the benefit plan herein established shall be maintained by all Companies in conformity with that of the American Telephone and Telegraph Company.

b) That yearly appropriations shall be made to keep the Fund intact, as provided in the sixth clause of Section 11

c) That an employee's term of employment, as hereinbefore defined, shall include employment not only in this Company but also in any Company with which reciprocal agreements under this plan shall have been made by the American Telephone and Telegraph Company.

d) That in case of consolidation with another Company having a similar employees' benefit plan, the benefit funds may likewise be consolidated.

SECTION 11. OBLIGATION OF THE COMPANY.

Section 11 amended effective January 1, 1927. For amendment see attachment to inside cover opposite.

The obligation of the Company is limited:

First: To safeguarding the Employees' Benefit Fund.

Second: To crediting to the Fund interest at the rate of 4% per annum on the average balance of the Fund.

Third: To the appointment of a Committee to administer the Fund according to these Regulations.

Fourth: To paying the expenses of the Committee in administering the Fund.

Fifth: To making payments out of the Fund upon the order of the Committee.

Sixth: To adding to the Fund at the end of each fiscal year such amount as will restore it to its original amount, provided that such addition shall in no year exceed 2% of the Company's pay roll.

SECTION 12. ORDER OF APPLICATION OF FUND.

If in any year the estimates of the Committee indicate that the Fund may not be sufficient to make the payments provided by these Regulations they shall report to the Board the estimated shortage and if the Board fails to make an extra appropriation to cover the shortage, then the employees shall be informed as to the facts and the available funds shall be applied:

First: To the payment of Pensions already granted.

Second: To the payment of Pensions to be granted during the year in accordance with the Regulations.

Third: To the payment of Accident Death Benefits.

Fourth: To the payment of Accident Disability Benefits.

Fifth: To the payment of other Death Benefits.

Sixth: To the payment of Sickness Disability Benefits.

SECTION 13. CHANGE IN REGULATIONS.

The Committee, subject to the provisions of Section 10 and with the consent of the President, may from time to time make such changes in these Regulations as in its judgment will more effectually carry out the purpose expressed therein, but such changes shall not affect the rights of any employee, without his consent, to any benefit or pension to which he may have previously become entitled hereunder.

MODIFICATION OF PLAN.

Effective January 1, 1927.

Resolution passed by the Board of Directors of Illinois Bell Telephone Company, December 28, 1927:

WHEREAS the Employees' Benefit Fund Committee, by unanimous resolution passed December 24, 1927, adopted the following memorandum:

"In order more effectually to carry out the purpose expressed in the 'Plan for Employees' Pensions, Disability Benefits and Death Benefits,' in effect January 1, 1913, as amended, certain modifications of said plan with respect to service pensions seem desirable both from the standpoint of the company and from that of its active and retired employees. (The terms 'service pensions' and 'retired employees' refer, respectively, to the pensions and the recipients of pensions under sub-sections (a) and (b) of paragraph one of Section 5 of said plan.) Such modifications are as follows:

1—Effective January 1, 1927, the undertaking of the company to pay service pensions shall not be limited by the conditions expressed in Section 11 of said plan with respect to employees to whom service pensions have heretofore been granted under said plan, and with respect to employees who are now entitled to retire on pension at their own request thereunder, and also with respect to employees who shall hereafter become entitled to retire on pension under said plan as it may be in effect from time to time.

2—In order to meet the obligations of the Company to pay service pensions under said plan granted after January 1, 1927, a pension fund shall be established and segregated from the assets of the company, and be held and disbursed only for service pension purposes by a trustee or trustees to be appointed by the president of the company under an agreement defining the terms upon which such fund shall be held and administered, all subject to the approval of the Executive Committee or the Board of Directors. In case of termination of said plan, or in case of revocation or other termination of said Trust, the company shall preserve the integrity of the pension fund as a Trust Fund to be applied solely to service pension purposes in the manner which in its judgment will enable it to meet its service pension obligations most effectively.

3—For employees with 15 years or more of service, there shall be charged to operating expenses and paid into said pension fund each year starting with 1927 amounts which actuarily determined and with allowance for interest accretions, will produce, at the times such employees become eligible to retire on pension at their own request under said plan, the full estimated present worth of the service pensions to which they are then entitled.

4—Until arrangements, if such are deemed advisable, approved by the Board of Directors are made for annuities corresponding to pensions heretofore or hereafter granted, disbursments for pensions granted prior to January 1, 1927, shall be charged directly to the employees' benefit reserve. If annuities are acquired with respect to pensions granted prior to January 1, 1927, such annuities shall be purchased from corporate assets, with corresponding reduction in the employees' benefit reserve of the company. Until annuities are acquired therefor, pensions granted after January 1, 1927, shall be paid from the pension fund, and the purchase price of such annuities, if and when acquired, shall likewise be paid from said fund.

5—All provisions of said plan inconsistent with this memorandum shall be cancelled, but, except as modified by this memorandum, said plan shall continue in effect, the granting of service pensions shall continue as heretofore, and disbursements for benefits other than service pensions shall continue in accordance with present practices.

EMPLOYEES' BENEFIT FUND COMMITTEE,
By W. E. CROSLEY,
Secretary.

Approved: W. R. ABBOTT,
President.

THEREFORE, BE IT RESOLVED, that said memorandum and the modifications of said plan therein contained be approved; that the company hereby assume the obligations set forth in said memorandum, and that the President of the company be authorized to do or cause to be done all things necessary or incidental to put into effect, as of January 1, 1927, the recommendations contained in said memorandum.

CITY'S EXHIBIT 53.

This Agreement, made this thirtieth day of December, 1914, by and between the American Telephone and Telegraph Company, a corporation of the State of New York (hereinafter called the "American Company"), party of the first part, and Chicago Telephone Company, a corporation of the State of Illinois (hereinafter called the "Associate Company"), party of the second part.

WITNESSETH:

Whereas, the American Company has heretofore made certain arrangements by which, under a plan designated as "Plan to Aid Employees of Bell System to Become Stockholders of American Telephone and Telegraph Company," its employees and the employees of such of its Associated Companies as may approve said plan may purchase shares of the capital stock of the American Company;

Now, Therefore, in consideration of the premises, the parties hereto hereby agree as follows:

First: That the Associate Company has in all respects approved, and does hereby in all respects approve, said plan and desires that its eligible employees shall have the right to avail themselves of the opportunities which said plan affords.

Second: That the American Company has, and does hereby, extend said plan so as to include thereunder the employees of the Associate Company. A copy of said plan is hereto attached and hereby made a part hereof.

Third: That the Associate Company shall forthwith, after the execution of this agreement, cause each of its employees to be notified of his (or her) right in the premises and, at the same time, cause to be delivered to each such employee a copy of said plan, which is to be furnished to it by the American Company for that purpose.

Fourth: That, whenever any employee of the Associate Company shall make application to purchase shares of said stock under said plan, the Associate Company shall certify, in such manner and in such form as the Trustees under said plan may signify, as to the right of such employee to purchase stock under said plan and as to the amount thereof which he is entitled thereunder to purchase.

Fifth: That the Associate Company shall deduct from the

wages of such of its employees as may purchase stock under and pursuant to said plan any and all sums which said plan provides shall be so deducted, and shall transmit monthly to the treasurer of the American Company all such amounts and any other amounts received under said plan.

Sixth: That the Associate Company shall, upon the request of said Trustees, do and perform any other act or acts which may be reasonably necessary and which it can do locally and with respect to its own employees to promote the successful carrying out of said plan.

Seventh: That neither party hereto shall make any charge to the other for any services performed hereunder.

In Witness Whereof, the parties hereto have caused these presents to be signed and their respective corporate seals to be hereto affixed by their respective officers thereunto duly authorized, on the day and in the year first above written.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY,
By U. N. BETHELL,
Senior Vice-President.

Attest:
A. A. MARSTERS,
Secretary.

CHICAGO TELEPHONE COMPANY,
By B. E. SUNNY,
President.

Attest:
S. D. WIENAN,
Secretary.

CITY'S EXHIBIT 54.

ILLINOIS BELL TELEPHONE COMPANY

PAYMENTS MADE TO AMERICAN TELEPHONE AND TELEGRAPH COMPANY COVERING COLLECTIONS UNDER THE EMPLOYEES' STOCK PLAN.

1921	$ 390,652.20
1922	2,683,057.85
1923	1,510,903.76
1924	1,246,401.33
1925	1,231,251.67

CITY'S EXHIBIT 55.

THIS AGREEMENT, made this fifth day of November, 1904, by and between WESTERN ELECTRIC COMPANY, a corporation organized and existing under the laws of the State of Illinois, party of the first part, hereinafter called the Electric Company, and the CHICAGO TELEPHONE COMPANY, a corporation organized and existing under the laws of the State of Illinois, party of the second part, hereinafter called the Telephone Company,

WITNESSETH: That the said parties for value received and in consideration of the agreements herein contained, do hereby for themselves, their successors and assigns, covenant and agree as follows:

RELATIONS AND SERVICES.

1. The Electric Company agrees—

(a) To establish, maintain and operate store rooms and offices at such place or places as the Telephone Company may designate or approve.

(b) To ship or deliver from its factory or from said store rooms to such persons, at such places, in such quantities, in such a manner, and at such times as the Telephone Company may reasonably designate under the provisions hereinafter stated, all kinds of telephonic appliances manufactured by the Electric Company under exclusive license from The American Bell Telephone Company.

(c) To receive, insure, care for and deliver to such persons, at such places, in such quantities, in such a manner, and at such times as the Telephone Company may reasonably designate, all telephones and transmitters or other apparatus leased or sold by The American Bell Telephone Company, its successors or assigns, to the Telephone Company.

(d) To procure by purchase, manufacture or otherwise and to deliver to such persons, at such places, in such quantities, in such a manner, and at such times as the Telephone Company may reasonably designate under the provisions hereinafter stated, all other apparatus, supplies and material, except such as may be excluded by notice as hereinafter provided, which the Telephone Company may require, all to be in accordance with the reasonable specifications of the Telephone Company.

(e) To receive from the Telephone Company upon its

request any telephonic appliances, apparatus, supplies and material which have been used by the Telephone Company, and to repair, convert and reissue, or to otherwise dispose of, the same at such times and in such a manner as may be reasonably required by the Telephone Company.

(f) To provide and carry in available location and condition at all times such emergency stock as the Tele phone Company shall from time to time specify.

The Telephone Company agrees to buy all its telephonic appliances, apparatus, supplies and material—excluding only such articles as may be from time to time specifically designated by the Telephone Company from or through the Electric Company, and to pay for the same, all as hereinafter provided.

REMUNERATION.

2. The Telephone Company agrees to pay to the Electric Company monthly installments to apply upon the cost of the services hereinbefore enumerated and all the reasonable expenses incidental thereto, including interest at a reasonable rate on the investment, and, further, including all freight, packing and cartage charges except when the same are included in or added to the prices as hereinafter described in Section 3. Said monthly installments to be ascertained by taking 2.87% of the cost of the articles billed and credited during the month, as represented by the sum of the bills of the Electric Company against the Telephone Company, for goods delivered, and the credits of the Electric Company to the Telephone Company for goods returned; but not including bills for reissues (re-deliveries) nor bills or credits for adjustments except as additions to or deductions from the cost of articles. At the end of the year an adjustment shall be made, with reasonable interest allowances, upon the basis of the actual cost of said services.

Provided, that during any year of the operation of this contract the proportion of cost of said services and expenses to cost of articles with which they are connected shall not be greater than the proportion of cost of corresponding services and expenses to cost of articles with which they were connected during the Telephone Company's fiscal year ending December 31, 1903. Preliminary to the operation of this contract a detailed description of such services and expenses and a statement of their cost and a statement of the cost of arti-

cles with which they were connected during said year shall be prepared and agreed upon and shall form a part of this contract.

PRICES.

3. The Electric Company agrees to charge for all articles furnished to the Telephone Company hereunder at prices made up for various classes as follows:

(a) Telephonic appliances manufactured under exclusive license from The American Bell Telephone Company at prices which shall be uniform to all licensees of The American Bell Telephone Company.

(b) Underground, Aerial and Submarine Cable manufactured by the Electric Company—at cost plus twelve and one-half per centum (12½%), but not to exceed the market prices.

(c) Other manufactures of the Electric Company—at the lowest prices made by the Electric Company to any customer in the United States in any quantity, which prices shall not exceed the market prices.

(d) Articles not made by the Electric Company—at cost to the Electric Company, plus two per centum (2%).

(e) Attaching telephones and transmitters to other apparatus and repair work of all kinds—at prices to be fixed by mutual agreement, or, in cases of failure to agree, at thirty per centum (30%) above the actual cost of labor and material.

The term "cost" as used in this Section, means the net cost to the Electric Company plus such transportation charges as are included in the prices of the goods. The Telephone Company shall have the privilege of access to necessary information to permit proper auditing of said cost.

If at any time the Telephone Company finds it advisable to take advantage of any apparently favorable market it may require the Electric Company to purchase in accordance with the above provisions, a specified quantity of any article to be taken within a specified period not exceeding one year. The Electric Company shall furnish such information as to prices as may be desired by the Telephone Company at such times as it may designate.

In comparing prices, as provided above, fluctuations in the market prices at different times, differences in quantity, differences in quality, differences in freight or other transportation, and any other differences and conditions which may be found to exist, shall be taken into consideration.

ROUTINE.

4. The Routine of operation necessary for the proper distribution of and accounting for all apparatus, supplies and material furnished the Telephone Company, in so far as it affects the Telephone Company's routine and except as herein otherwise provided, shall be approved by the Telephone Company.

Either party may require from the other receipts for all deliveries of apparatus, supplies or material.

The Electric Company shall not be required to deliver any apparatus, supplies or material, or to buy any unusual quantities of supplies or material, or to manufacture any special apparatus, except on the Telephone Company's written requisition and the Telephone Company agrees to take all the apparatus, supplies or material so bought or manufactured, or, failing so to do within a reasonable period, to reimburse the Electric Company for all actual loss sustained by it on account of such failure.

The Electric Company shall render a monthly statement of account which shall be due and payable thirty (30) days after the date of its delivery to the Telephone Company, and any portion of said account not paid when due shall thereafter bear interest at a reasonable rate.

INSPECTION AND GUARANTEE.

5. The Electric Company agrees to inspect all articles requisitioned under this contract, and guarantees that all articles furnished shall, when delivered to the Telephone Company, conform to sample furnished or to the reasonable specifications given or referred to in the Telephone Company's requisition for said articles, or, when no specifications are given or referred to, that the articles shall be such as are, in the judgment of the Electric Company, best adapted in form, quality and cost to the use to which it is intended they shall be put, and the Telephone Company agrees to bear the cost of inspection of all articles not manufactured by the Electric Company.

If, however, the Telephone Company shall waive inspection by the Electric Company, or if it shall authorize the Electric Company to deliver articles passed under some inspection other than that of the Electric Company, then the Electric Company shall be relieved from all pecuniary liability under the aforesaid guarantee, but must use its best endeavors to obtain for the Telephone Company indemnity for any expense or loss arising from defects in such articles.

USED MATERIAL.

6. Any used apparatus, supplies or material—excluding telephones, transmitters, or other apparatus belonging to The Americain Bell Telephone Company—may be returned to the Electric Company for storage or for sale, repair or conversion, at such prices as may be mutually agreed upon.

PRESENT STOCK.

7. Any apparatus, supplies and material, the property of the Telephone Company in its supply stock at the beginning of the operation of this contract, may be listed and sold to the Electric Company at the prices hereinbefore provided for, or otherwise mutually agreed on or stored with the Electric Company under this contract.

ARBITRATION.

8. Any question arising under this contract may be referred by either party for decision to such person or persons as the Presidents of the two Companies, parties hereto, may agree upon, and the decision of such person or persons shall be final and binding upon the parties hereto.

DELAYS.

9. Whereas, the due prosecution of the business of the Telephone Company requires that its apparatus, supplies and material shall be promptly furnished and as herein provided, and

Whereas, the time required to ascertain judicially whether the Electric Company shall or shall not have failed to perform its obligations hereinunder might cause a delay which would work damage to the Telephone Company,

Now, it is an integral part of this contract that whenever the President of the Telephone Company shall be of the opinion that the Electric Company has failed in its obligations in this respect, or that there is imminent danger or probability that it will so fail, the Telephone Company may without notice or demand purchase elsewhere such apparatus, supplies and material—excluding telephonic appliances manufactured by the Electric Company under exclusive license from The American Bell Telephone Company—as in its opinion may be required to meet the emergency, and it shall thereafter be determined by a referee or referees hereinbefore provided for, whether or not the opinion so acted upon by the Tlephone Company was erroneous, and what, if any, damage resulted to either the Telephone Company or the Electric

Company, and it is hereby agreed that any assessment for damages which said referee or referees may make in the premises shall be accepted by the parties so assessed as a just obligation.

DURATION.

10. The active operation of this contract began May 1, 1904, and it shall remain in force until terminated by mutual agreement, or by one year's notice in writing from either party to the other.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be signed in their behalf by their respective officers thereunto duly authorized, and their corporate seals to be hereunto affixed the day and year first above written

WESTERN ELECTRIC COMPANY,
By (Signed) E. M. BARTON,
(Seal) *President.*

Attest:
(Signed) C. G. DUBOIS,
Secretary.

CHICAGO TELEPHONE COMPANY,
By (Signed) ARTHUR D. WHEELER,
President.

Attest:
(Signed CHARLES E. MOSLEY,
(Seal) *Secretary.*

Description of services and expenses of the Chicago Telephone Co., and statement of their cost, and of the cost of articles with which they were connected for the year ending Dec. 31, 1903; showing proportion of said cost of services and expenses to said cost of articles, as provided in Article 2 of the Agreement.

SERVICES AND EXPENSES.

Expenses:		
Rentals, etc.	120-2 Franklin St.	
	(1/1/03-5/1/03—4 mos. at $375	
	(5/1/03-1/1/04—8 mos. at 500	
	124 Franklin St.	
	(1/1/03-5/1/03—4 mos. at 150	
	(5/1/03-1/1/04—8 mos. at 175	$7500.00
	Pole yard,	300.00
	Harrison yard (estimated)	1000.00
	Hauling rubbish	11.50
	Board of Fire Underwriters for Inspection,	8.00

	Street Sprinkling,	40.00	
	Water,	81.39	
	Burglar Alarm	180.00	
	Consumers Co. Ice,	116.65	
	Clean towels,	111.94	$9349.48
Salaries and Wages,			
	Supply Dept.	$25564.20	
	Purchasing Dept.	3079.50	
	Storekeeper	1800.00	
	Purchasing Agt.	2700.00	33143.70
Insurance,			3132.27
Taxes—	Estimated assessed value say	$30000.00	
	Rate .05853 per $100		1755.90
	Depreciation on Furniture, etc. 10% of $2000.00 "Estimated"		200.00
Light	Per meter reading, Gas	$ 139.24	
	Electric	1289.44	1428.68
Power and Heat, per meter,			328.85
Telephone Service, at standard rate, (including Danielson's at $60.00)			622.00
Postage,	"Estimated"		500.00
Telegrams,	"		10.00
Stationery,	"		500.00
Packing Boxes,			2219.00
Various Packing material, wrapping paper, paper boxes, bottles, twine, etc. "Estimated",			900.00
Teaming—3 single trucks and one double truck (Charge of J. H. Burke, Teaming Contractor),			3600.00
Interest on $300,000.00 at 5%			15000.00
			$72689.88

COST OF ARTICLES

Total Purchases, as per vouchers,	$1,844,069.18
Returned to Supply by other Departments.	667,159.55
Cost of C. T. Co.'s Shop	17,985.40
Total	$2,529,214.13

Proportion of Cost, 2.87%

Certified Correct:

CHICAGO TELEPHONE COMPANY,
By (Signed) J. W. RICHARD,
Auditor.

Assented to
WESTERN ELECTRIC COMPANY,
November 5, 1904.
(Signed) C. G. DUBOIS,
Secretary.

CITY'S EXHIBIT 56.

STANDARD SUPPLY CONTRACT
AND
SUPPLEMENTARY AGREEMENTS
BETWEEN
WESTERN ELECTRIC COMPANY, INC.
AND
THE ASSOCIATED BELL TELEPHONE COMPANIES
January 1, 1924.

(Copy)

WESTERN ELECTRIC COMPANY
New York

December 22, 1923.

Mr. W. R. Abbott, President,
Illinois Bell Telephone Company,
212 West Washington Street,
Chicago, Illinois.

Dear Mr. Abbott:

By the execution of the new form of telephone supply contract between us dated January 1, 1924, which is effective beginning January 1, 1924, it is the understanding that the old form of contract between us dated October 8, 1920, is cancelled by mutual consent.

If this meets with your approval may I ask you to note your acceptance on one copy of this letter, to be returned to me for our files.

Yours very truly,
(Signed) F. B. JEWETT,
Vice-President.

Accepted:
ILLINOIS BELL TELEPHONE CO.
By (Signed) W. R. ABBOTT,
President.

Dec. 27, 1923.

STANDARD SUPPLY CONTRACT.

MEMORANDUM OF AGREEMENT dated January 1, 1924, between WESTERN ELECTRIC COMPANY, Incorporated, a corporaton of the State of New York, hereinafter called the Electric

Company, and ILLINOIS BELL TELEPHONE COMPANY, a corporation of the State of Illinois, hereinafter called the Telephone Company.

1. The Electric Company agrees to maintain storerooms and stocks of apparatus of its own manufacture at its present and future distributing points, and/or at such other places as may be agreed upon. Classes and quantities of such stocks shall be agreed upon from time to time.

2. The Electric Company agrees to purchase, pay transportation on, adjust claims with carriers in connection with, store and deliver to the Telephone Company, at the Electric Company's storerooms or other sources of supply, from time to time, supplies not of its own manufacture which are sold in the open market or can be secured from other suppliers and which the Telephone Company may reasonably require for its business, such supplies to be so delivered in such quantities, in such manner, and at such times as the Telephone Company may reasonably designate. Classes and quantities of such stocks shall be as agreed upon from time to time.

3. The Telephone Company agrees to pay the Electric Company the cost to the Electric Company of the supplies delivered to the Telephone Company under Section 2 above, and in addition to remunerate the Electric Company for its services as purchasing agent and storekeeper as described in said section and on account of the investment thereby required, by the payment to the Electric Company of percentages, on the cost of the supplies delivered, now fixed by the supplementary agreement supplementing this section, or by modifications of such supplement as may be agreed upon from time to time, such remuneration at all times, to be as low as that paid under comparable conditions, by the Electric Company's most favored customers.

The term "cost" as used in this section shall include the following:

(a) The net price which the Electric Company is obligated to pay the supplier after all allowances, discounts and commissions have been deducted;

(b) Expenses incurred by the Electric Company because of special technical services in connection with furnishing such supplies;

(c) In case the Electric Company should purchase and furnish raw materials to mills, not the mills of the Elec-

tric Company, manufacturing them into articles for the Telephone Company, the reasonable carrying charges for such raw materials and transportation charges to the mills, taxes and insurance;

(d) Transportation charges which in whole or in part are treated by the supplier as a part of his net price to the Electric Company.

All other transportation charges, except cartage to the Electric Company's storerooms, shall be charged to the Telephone Company, but without the addition of the aforesaid percentages.

Cartage charges to the Electric Company's storerooms shall be borne by the Electric Company.

4. The Telephone Company shall be under no obligation to purchase any article manufactured by the Electric Company. Such articles manufactured by the Electric Company as the Telephone Company may order and the Electric Company furnish from time to time, shall be furnished, without the addition of any service charge, at prices which shall be as low as the Electric Company's prices, under comparable conditions, to its most favored customers, in effect on the date of shipment. Apparatus designed or engineered by the Electric Company and manufactured in whole or in part by others on the orders and to the specifications of the Electric Company shall be classified as manufactures of the Electric Company.

5. The Electric Company shall not be required to deliver any apparatus or supplies, or to procure any unusual quantities of apparatus or supplies, or any special apparatus or supplies, except on the Telephone Company's written requisition, and the Telephone Company agrees that such unusual quantities of apparatus or supplies, or special apparatus or supplies procured by the Electric Company, shall be carried under the terms of Section 7 of this agreement.

6. The Telephone Company agrees that, in case it shall decide to abandon or reduce the use of any special apparatus or supplies or to purchase through or from others, apparatus or supplies which it has theretofore customarily purchased through or from the Electric Company, it will give the Electric Company reasonable notice of such intention on its part, and will relieve the Electric Company of stocks thereof on hand or will reimburse it for any loss on account of any reasonable amount of stocks carried or ordered by the Electric

Company prior to the receipt of such notice, in anticipation of the Telephone Company's orders.

7. The Electric Company further agrees, upon the request of the Telephone Company, to undertake and perform, with due care and diligence, any or all of the following described special services (none of which is included in the undertakings of the Electric Company hereinbefore described), in such manner, upon such terms and conditions and for such remuneration as may be agreed upon from time to time, such remuneration at all times to be as low as that paid under comparable conditions, by the Electric Company's most favored customers.

(a) Receiving, classifying, storing, insuring, carrying the investment in and reissuing or disposing of any apparatus or supplies returned by the Telephone Company;

(b) Carrying any special or unusual stock of apparatus or supplies which may accumulate or which the Telephone Company may prescribe from time to time;

(c) Making such repairs to apparatus or supplies at Distributing House shops, as the Telephone Company may reasonably require;

(d) Special technical or engineering inspection of supplies not of Electric Company manufacture;

(e) Cartage of all apparatus or supplies from the Electric Company's storerooms, and cartage to the Electric Company's storerooms of returned apparatus or supplies and new lead covered cable;

(f) Furnishing paper to printers for directories and printed forms, and carrying the investment therein;

(g) Any special accounting or clerical work not ordinarily required of a purchasing agent or storekeeper, or any other services of like character not hereinbefore in this agreement described.

8. The Electric Company shall render monthly statements of account which shall be due and payable thirty days after date of such monthly statements. If payment is deferred, the account shall thereafter bear interest at a reasonable rate.

9. The Electric Company shall be liable under this agreement only for direct damages arising from failure to exercise reasonable care and diligence in performing its obligations hereunder, and in addition, as to any articles manufactured by the Electric Company, or specially inspected by it under

Section 7 of this agreement, which prove to be defective, the Electric Company shall be obligated either to replace the same at its own expense or to take back and allow full credit therefor. Articles furnished to replace those which prove to be defective, shall be furnished f. o. b. destination of original shipment to the Telephone Company.

10. This agreement shall become operative January 1, 1924, and shall remain in force thereafter until terminated by mutual agreement or by one year's notice in writing from either party to the other, or by the termination of the license from the American Telephone and Telegraph Company to the Telephone Company or to the Electric Company.

IN WITNESS WHEREOF, the parties to this agreement have caused these presents to be signed in their behalf by their respective officers thereunto duly authorized, and their corporate seals to be hereunto affixed the day and year first above written.

WESTERN ELECTRIC COMPANY, INCORPORATED.
By (Signed) F. B. JEWETT,
(Seal) *Vice President.*
Attest: (Signed) GEO. C. PRATT,
Secretary.
ILLINOIS BELL TELEPHONE COMPANY.
By (Signed) W. R. ABBOTT,
(Seal) *President.*
Attest: (Signed) E. G. DREW,
Secretary.

Sections 1 and 2

SUPPLEMENTARY AGREEMENT TO

STANDARD SUPPLY CONTRACT

SUBJECT: CLASSES ANE QUANTITIES OF STOCK

Standard Agreement supplementing Sections 1 and 2 of the Standard Supply Contract effective January 1, 1924, between Western Electric Company, Inc., and Illinois Bell Telephone Company.

1. GENERAL

Classes and quantities of stocks to be maintained under Sections 1 and 2 of the Standard Supply Contract shall be as follows.

2. Classification and Responsibility

All such stocks may be considered as coming under one of the following three classifications.

2.1 Class 1

2.11 Apparatus or supplies standard to the Telephone Company and standard to the Electric Company, i.e., Electric Company apparatus manufactured under license from the American Telephone and Telegraph Company or approved by the American Telephone and Telegraph Company, and supplies not of Electric Company manufacture which are commercially standard, not including central office switchboards or other standard apparatus which must be specially assembled for each job.

2.12 The Electric Company will maintain stocks of this class in reasonable quantities. The Telephone Company's estimate of future requirements will neither constitute an authorization by it, nor an obligation on the Electric Company's part to purchase more than a reasonable stock.

2.2 Class 2

2.21 Apparatus or supplies standard to the Telephone Company but special to the Electric Company, i.e., manufactured under the Telephone Company's specifications, and used regularly by the Telephone Company but not commercially standard, not including poles and directories which ordinarily will be shipped direct.

2.22 The Electric Company will, after having been advised by the Telephone Company in writing as to its initial requirements, stock apparatus or supplies of this class in reasonable quantities without written authority for each purchase.

2.3 Class 3

2.31 Apparatus or supplies special to the Telephone Company and special to the Electric Company.

2.32 Purchase and delivery. See Section 5 of the Standard Supply Contract.

3. Reasonable Stock

Stocks in reasonable quantities referred to herein shall be sufficient to meet the Telephone Company's average requirements for ordinary construction and maintenance together with proper consideration for seasonal demands, condition of the market and length of time required to

transport material from the main sources of supply to the Electric Company's storerooms.

4. DURATION

4.1 This agreement shall become effective on January 1, 1924, and may be altered by mutual agreement or terminated upon one year's notice in writing from either party to the other.

4.2 This agreement replaces and cancels Supplementary Agreement executed by the parties hereto effective January 1, 1922, covering Section 2 of the Standard Supply Contract effective November 1, 1920.

WESTERN ELECTRIC COMPANY, INCORPORATED.
By (Signed) F. B. JEWETT,
Vice President.
Attest: (Signed) GEO. C. PRATT,
Secretary.

ILLINOIS BELL TELEPHONE COMPANY.
By (Signed) W. R. ABBOTT,
President.
Attest: (Signed) E. G. DREW,
Secretary.

Section 3

SUPPLEMENTARY AGREEMENT TO STANDARD SUPPLY CONTRACT

SUBJECT: REMUNERATION FOR SERVICES AS PURCHASING AGENT AND STOREKEEPER OF SUPPLIES NOT OF ELECTRIC COMPANY MANUFACTURE

Standard Agreement supplementing Section 3 of the Standard Supply Contract effective January 1, 1924, between Western Electric Company, Inc., and Illinois Bell Telephone Company.

The following percentages shall be added to the Electric Company's cost as defined in Section 3 of the Standard Supply Contract, as compensation for the services provided for in Section 2 thereof.

	Purchasing, Carrying, Storing, Shipping, etc., on shipments from any storeroom of the Electric Company.	Purchasing, etc., shipments from any other point direct to the Telephone Company.
Bare Hard Drawn Copper Wire and Ties Therefore.....	5%	1.5%
Poles	....	4%
Stationery and Office Supplies..	10%	5%
Stationery and Office Supplies Where Simplified Billing Plan is not in effect	12%	5%
Directories	....	1%
Other Supplies under Section 2	8%	4%

DURATION

This agreement shall become effective on January 1, 1924, and may be altered by mutual agreement or terminated upon one year's notice in writing from either party to the other.

This agreement replaces and cancels Supplementary Agreement executed by the parties hereto effective..... ..... covering Section ..... of the Standard Supply Contract effective .....

WESTERN ELECTRIC COMPANY, INCORPORATED.
By (Signed) F. B. JEWETT,
Vice President.
Attest: (Signed) GEO. C. PRATT,
Secretary.

ILLINOIS BELL TELEPHONE COMPANY.
By (Signed) W. R. ABBOTT,
President.
Attest: (Signed) E. G. DREW,
Secretary.

Section 7-(a)

Supplementary Agreement to Standard Supply Contract

Subject: Returned Apparatus or Supplies

Standard Agreement supplementing Section 7-(a) of the Standard Supply Contract effective January 1, 1924, between Western Electric Company, Inc., and Illinois Bell Telephone Company.

1. Service

The services specified in Section 7-(a) of the Standard Supply Contract will be performed upon the following terms.

2. Delivery to the Electric Company

Apparatus or supplies returned by the Telephone Comphone Company shall be delivered f. o. b. the Electric Company's storerooms or other points designated by the Electric Company.

3. Classifying and storing

3.1 Apparatus or supplies received at the Electric Company's storerooms will be divided into the following classes, based on such visual inspection by experienced storeroom employees as is necessary to classify it, such classification to be subject to the approval of the Telephone Company. No other inspection is contemplated in the rates of remuneration specified in Paragraph 9 of this agreement.

3.2 Class A

3.21 Surplus apparatus of Electric Company manufacture, for which there is not a probable demand within a reasonable time, returned by the Telephone Company for allowance.

3.22 Where such apparatus is in large lots it may be returned by the Telephone Company direct from the field to the Electric Company's factories.

3.3 Class B

3.31 Apparatus or supplies which have no value except as junk.

3.32 Large lots of such apparatus or supplies which the Telephone Company desires to dispose of through the

Electric Company may be returned by the Telephone Company direct from the field to such destination as the Electric Company may designate.

3.4 Class C

Apparatus or supplies of active types, including lead covered cable, for which there is a probable demand within a reasonable time, other than Classes "D," "E" and "F."

3.5 Class D

Switchboard cords and plugs returned to the Electric Company for stock.

3.6 Class E

Switchboard cords and plugs which are sent in by the Telephone Company to be repaired and returned immediately to the point from which they were sent.

3.7 Class F

3.71 Active types of sub-station apparatus or supplies returned from the Telephone Company's plant in the city in which retail distribution is performed by the Electric Company, and requiring only minor repairs.

3.72 When returns of sub-station apparatus or supplies which would normally be classified "F" exceed the demand, the excess returns shall be classified "C."

4. Crediting

4.1 Class A

The Telephone Company shall be credited for this class of apparatus at the Electric Company's allowance prices, based upon the classification of such apparatus when received at the Electric Company's factories.

4.2 Class B

The Telephone Company shall be credited with the net proceeds resulting from the sale of this class of apparatus or supplies.

4.3 Direct Shipment—Classes A and B

Credit shall not be rendered to the Telephone Company for such apparatus or supplies returned direct by the Telephone Company to the Electric Company's factories or other purchaser until the Electric Company's Distributing House has obtained final credit.

4.4 Classes C, D and F

Apparatus or supplies of these classes shall be credited to the Telephone Company at the price of corre-

sponding new apparatus or supplies, and will be reissued to the Telephone Company at the price allowed on the credit.

4.5 Class E

Cords and plugs of this class will neither be credited to the Telephone Company when received by the Electric Company nor billed to the Telephone Company when reshipped to the point from which they were sent.

5 Repairs

Necessary repairs to Classes "C," "D," "E" and "F" apparatus or supplies shall be made under the terms of the Supplementary Agreement covering Section 7-(c) of the Standard Supply Contract and the cost of such repairs shall be billed to the Telephone Company separately.

6. Insurance

6.1 For insurance purposes, Classes "C," "D" and "F" apparatus or supplies in the Electric Company's storerooms shall be valued at 50% of the current new value of similar apparatus or supplies, and the Electric Company shall insure on a basis of 80% of this valuation.

6.2 In case of loss by fire, the Telephone Company shall reimburse the Electric Company in an amount equal to the difference between such insurance as the Electric Company may be able to collect on such apparatus or supplies so lost and the amount credited the Telephone Company by the Electric Company for such apparatus or supplies.

7. Re-issue or Other Disposition

7.1 Class A

After such apparatus has been delivered to a space set aside for it, the Telephone Company shall have no further responsibility for transportation to the Electric Company's factories.

7.2 Class B

The Electric Company shall provide space for storing such apparatus or supplies until sufficient quantities have accumulated to warrant selling to the best advantage.

7.3 Classes C, D and F

The Electric Company will hold such apparatus or supplies subject to the Telephone Company's order.

8. CARRYING CHARGE

Classes "C," "D" and "F" apparatus or supplies not drawn from the Electric Company's storerooms within one year from the date of credit shall be subject to a carrying charge thereafter until shipped to the Telephone Company or otherwise disposed of as authorized by it.

9. REMUNERATION

For performing the services described in the preceding paragraphs, the Electric Company will bill the Telephone Company monthly as follows:

9.1 Class A	3% of the amount credited for such apparatus returned to the storerooms.
9.2 Class B	7% of the selling price of such apparatus or supplies sold from the storerooms.
9.3 Direct Shipment of Class A or B	1% of the amount credited.
9.4 Class C	7% of the amount credited.
9.5 Class D	4% of the amount credited.
9.6 Class E	$1.00 per 100 cords and plugs returned.
9.7 Class F	4% of the amount credited.
9.8 Carrying Charge specified in paragraph 8	8% per annum of the average monthly investment.

10. DURATION

10.1 This agreement shall become effective on January 1, 1924, and may be altered by mutual agreement or terminated upon ninety (90) days' notice in writing from either party to the other.

10.2 This agreement replaces and cancels Supplementary Agreement executed by the parties hereto effective January 1, 1922, covering Section 6-A of the Standard Supply Contract effective .....

WESTERN ELECTRIC COMPANY, INCORPORATED.
By (Signed) F. B. JEWETT,
Vice President.
Attest: (Signed) GEO. C. PRATT,
Secretary.

ILLINOIS BELL TELEPHONE COMPANY.
By (Signed) W. R. ABBOTT,
President.
Attest: (Signed) E. G. DREW,
Secretary.

Section 7-(b)

Supplementary Agreement to Standard Supply Contract

Subject: Special and Unusual Stocks

Standard Agreement supplementing Section 7-(b) of the Standard Supply Contract effective January 1, 1924, between Western Electric Company, Inc., and Illinois Bell Telephone Company.

1. Service

The services specified in Sections 5 and 7-(b) of the Standard Supply Contract will be performed upon the following terms.

2. Remuneration

For carrying such Special and Unusual Stocks the Electric Company will bill the Telephone Company monthly at the rate of 8% per annum on the average monthly investment in this class of apparatus or supplies; this charge to begin thirty (30) days after the Telephone Company has been notified that the apparatus or supplies is in storage and subject to its order, and to continue until delivery to the Telephone Company or until, upon the Telephone Company's authority, the Electric Company takes it, in reasonable quantities into its general stock, or otherwise disposes of it.

3 Duration

3.1 This agreement shall become effective on January 1, 1924, and may be altered by mutual agreement or terminated upon ninety (90) days' notice in writing from either party to the other.

3.2 This agreement replaces and cancels Supplementary Agreement executed by the parties hereto effective January 1, 1922, covering Section 6-B of the Standard Supply Contract effective November 1, 1920.

Western Electric Company, Incorporated.
By (Signed) F. B. Jewett,
Vice President.
Attest: (Signed) Geo. C. Pratt,
Secretary.

Illinois Bell Telephone Company.
By (Signed) W. R. Abbott,
President.
Attest: (Signed) E. G. Drew,
Secretary.

Section 7-(c)

Supplementary Agreement to Standard Supply Contract

SUBJECT: MAKING REPAIRS TO APPARATUS OR SUPPLIES AT DISTRIBUTING HOUSE SHOPS

Standard Agreement supplementing Section 7-(c) of the Standard Supply Contract effective January 1, 1924, between Western Electric Company, Inc., and Illinois Bell Telephone Company.

1. Service

The services specified in Section 7-(c) of the Standard Supply Contract will be performed upon the following terms.

2. Remuneration

2.1 The Electric Company may bill such repair work at firm prices as agreed upon, the basis for such prices to be as set out in paragraph 2.2 and to hold good until changes in costs of material and labor make a revision necessary.

2.2 For such work not covered by firm prices, the Electric Company shall charge on the following basis:

(a)—Material—At prices under Sections 3 and 4 of the Standard Supply Contract.

(b)—Productive Labor—At actual cost.

(c)—The following rates applied on the actual cost of productive labor to cover Shop Expense, General and Local Supervision, and Interest on Investment:

General Repairs	30%
Metal and Woodworking	60%
Wood Finishing	45%
Metal Finishing	90%
Switchboard Wiring	45%

3 Duration

3.1 This agreement shall become effective on January 1, 1924, and may be altered by mutual agreement or terminated upon ninety (90) days' notice in writing from either party to the other.

3.2 This agreement replaces and cancels Supplementary Agreement executed by the parties hereto effective Janu-

ary 1, 1922, covering Section 6-D of the Standard Supply Contract effective November 1, 1920.

WESTERN ELECTRIC COMPANY, INCORPORATED.
By (Signed) F. B. JEWETT,
Vice President.
Attest: (Signed) GEO. C. PRATT,
Secretary.

ILLINOIS BELL TELEPHONE COMPANY.
By (Signed) W. R. ABBOTT,
President.
Attest: (Signed) E. G. DREW,
Secretary.

(Section 7-(d)

SUPPLEMENTARY AGREEMENT TO
STANDARD SUPPLY CONTRACT

SUBJECT: INSPECTION

Standard Agreement supplementing Section 7-(d) of the Standard Supply Contract effective January 1, 1924, between Western Electric Company, Inc., and Illinois Bell Telephone Company.

1. SERVICE

The services specified in Section 7-(d) of the Standard Supply Contract will be performed upon the following terms.

2. REMUNERATION

2.1 Inspection charges are not part of the cost under Section 3 of the Standard Supply Contract.

2.2 The Electric Company will bill the Telephone Company at the following standard rates. These rates are based on the Electric Company's cost of performing this service including interest charges and are subject to revision when warranted by changes in cost.

2.3

Group Number.		
1. Bare hard drawn copper line wire and ties therefor.....	.2%	applied to net cost of supplies.
2. All other bare wire, ties, insulated wire, cable and strand.....	.7%	" "

3. Poles—		
3 (a)—Creosoted pine poles..	4.0%	" "
3 (b)—Untreated chestnut, cypress, juniper and Maine cedar poles	4.5%	" "
3 (c)—Butt treatment of chestnut, cypress, juniper and northern, western and Maine cedar poles.....	5.0%	applied to net cost of treating charges.
4. All other timber products for outside construction.....	4.0%	applied to net cost of supplies.
5. All other supplies not of Electric Company manufacture.....	2.5%	" "

3 DURATION

3.1 This agreement shall become effective on January 1, 1924, and may be altered by mutual agreement or terminated upon ninety (90) days' notice in writing from either party to the other.

3.2 This agreement replaces and cancels Supplementary Agreement executed by the parties hereto effective January 1, 1922, covering Section 6-G of the Standard Supply Contract effective November 1, 1920.

WESTERN ELECTRIC COMPANY, INCORPORATED.
By (Signed) F. B. JEWETT,
Vice President.
Attest: (Signed) GEO. C. PRATT,
Secretary.

ILLINOIS BELL TELEPHONE COMPANY.
By (Signed) W. R. ABBOTT,
President.
Attest: (Signed) E. G. DREW,
Secretary.

Section 7-(e)

SUPPLEMENTARY AGREEMENT TO

STANDARD SUPPLY CONTRACT

SUBJECT: CARTAGE

Standard Agreement supplementing Section 7-(e) of the Standard Supply Contract effective January 1, 1924, between Western Electric Company, Inc., and Illinois Bell Telephone Company.

1. SERVICE

The services specified in Section 7-(e) of the Standard Supply Contract will be performed upon the following terms.

2. REMUNERATION

For performing such services the Electric Company will bill the Telephone Company monthly for the direct cost of cartage, plus 10% to cover general and local supervision and incidental expense.

3. DURATION

3.1 This agreement shall become effective on January 1, 1924, and may be altered by mutual agreement or terminated upon ninety (90) days' notice in writing from either party to the other.

3.2 This agreement replaces and cancels Supplementary Agreement executed by the parties hereto effective January 1, 1922, covering Section 6-H of the Standard Supply Contract effective November 1, 1920.

WESTERN ELECTRIC COMPANY, INCORPORATED.
By (Signed) F. B. JEWETT,
Vice President.
Attest: (Signed) GEO. C. PRATT,
Secretary.

ILLINOIS BELL TELEPHONE COMPANY.
By (Signed) W. R. ABBOTT,
President.
Attest: (Signed) E. G. DREW,
Secretary.

Section 7-(f)

Supplementary Agreement to Standard Supply Contract

SUBJECT: FURNISHING PAPER TO PRINTERS FOR DIRECTORIES AND PRINTED FORMS

Standard Agreement supplementing Section 7-(f) of the Standard Supply Contract effective January 1, 1924, between Western Electric Company, Inc., and Illinois Bell Telephone Co.

1. Service

In order to enable the Telephone Company to make a saving on large lots of newsprint and other grades of paper used by printers in manufacturing printed forms and directories, the Electric Company, under section 7-(f) of the Standard Supply Contract, will purchase and sell to printers for such purposes paper sold in the open market or which can be secured from other sources of supply, for the special remuneration set out below, deliveries to be made in such quantities, in such a manner and at such times as will meet the Telephone Company's reasonable requirements.

2. Billing to Printers, and crediting

2.1 Papers for printed forms shall be billed to the printers by the Electric Company at the prices which are established in contracts for printed forms with the printers, and paper for directors at actual cost.

2.2 The Electric Company shall credit (or charge as the case may be) the Telephone Company with the difference between such prices and the actual cost.

3. Remuneration

3.1 For such services, the Electric Company shall charge the following percentages on the actual cost of paper:

3.11 Newsprint 1%

3.12 Other grades.....2%

3.2 Such rates will remain in effect until a revision is warranted by changes in the Electric Company's cost. These rates are based on the Electric Company's cost of performing the service mentioned, and do not cover any pos-

sible loss or damage, such as the default of the printer in the payment of the Electric Company's account or a loss due to imperfect paper furnished which cannot be collected from the manufacturer of the paper, which losses shall be borne by the Telephone Company.

3.3 Such rates of remuneration contemplate the carrying by the Electric Company of the investment in paper billed to the printer for a period not to exceed sixty days. If it is necessary to extend this period due to the Telephone Company having held up or extended delivery schedules on authorized work in process, the Telephone Company agrees to pay carrying charges caused thereby, to the Electric Company until such time as the Electric Company's bills are paid by the printer.

3.4 Such remuneration does not cover the service of making contracts for forms and directories with printers, paying for the same as delivered, shipping, storing, carrying the investment in and delivering the same to the Telephone Company.

4. Special Adjustments

As the cost of printed forms furnished under Section 3 of the Standard Supply Contract may include a charge to the printer for paper greater or less than the actual cost thereof, adjustments of the amount by which the remuneration under said Section 3 shall be too little or too great by reason thereof shall be made, but since it is impossible to determine when the paper is purchased whether the printed forms will be for direct or stock shipments, the remuneration rate to be applied to these adjustments will be an average of the direct and stock rates specified in Supplementary Agreement to Section 3 of the Standard Supply Contract.

5. Duration

5.1 This agreement shall become effective on January 1, 1924, and may be altered by mutual agreement or terminated upon ninety (90) days' notice in writing from either party to the other. If the agreement is terminated, the Telephone Company shall assume the Electric Company's obligations for paper contracted for pursuant to this agreement, at the date of termination.

5.2 This agreement replaces and cancels Supplementary Agreement executed by the parties hereto effective Janu-

ary 1, 1922, covering Section 6-K of the Standard Supply Contract effective November 1, 1920.

WESTERN ELECTRIC COMPANY, INCORPORATED.
By (Signed) F. B. JEWETT,
Vice President.
Attest: (Signed) GEO. C. PRATT,
Secretary.

ILLINOIS BELL TELEPHONE COMPANY.
By (Signed) W. R. ABBOTT,
President.
Attest: (Signed) E. G. DREW,
Secretary.

Section 7-(g)

SUPPLEMENTARY AGREEMENT TO

STANDARD SUPPLY CONTRACT

SUBJECT: AUDITING FREIGHT AND EXPRESS BILLS

Standard Agreement supplementing Section 7-(g) of the Standard Supply Contract effective January 1, 1924, between Western Electric Company, Inc., and Illinois Bell Telephone Company.

1. SERVICE

Under Section 7-(g) of the Standard Supply Contract the Electric Company will audit, for rate and classification, all bills for freight or express paid by the Telephone Company and make proper adjustments with the Transportation Companies.

2. REMUNERATION

The Electric Company will bill the Telephone Company monthly at established rates or at its cost of performing this service, cost to include direct labor, plus 25% to cover general and local supervision and incidental expense.

3. DURATION

3.1 This agreement shall become effective on January 1, 1924, and may be altered by mutual agreement or terminated upon ninety (90) days' notice in writing from either party to the other.

3.2 This agreement replaces and cancels Supplementary Agreement executed by the parties hereto effective Janu-

ary 1, 1922, covering Section 6-L of the Standard Supply Contract effective November 1, 1920.

WESTERN ELECTRIC COMPANY, INCORPORATED.
By (Signed) F. B. JEWETT,
Vice President.
Attest: (Signed) GEO. C. PRATT,
Secretary.

ILLINOIS BELL TELEPHONE COMPANY.
By (Signed) W. R. ABBOTT,
President.
Attest: (Signed) E. G. DREW,
Secretary.

Section 7-(g)

SUPPLEMENTARY AGREEMENT TO STANDARD SUPPLY CONTRACT

SUBJECT: MOUNTING AND DISMOUNTING AMERICAN TELEPHONE AND TELEGRAPH COMPANY INSTRUMENTS

Standard Agreement supplementing Section 7-(g) of the Standard Supply Contract effective January 1, 1924, between Western Electric Company, Inc., and Illinois Bell Telephone Company.

1. SERVICE

Under Section 7-(g) of the standard Supply Contract the Electric Company will mount American Telephone and Telegraph Company instruments on apparatus or switchboards and dismount such instruments from returned apparatus or switchboards.

2. REMUNERATION

The Electric Company will bill the Telephone Company for this service at the following established rates, representing the Electric Company's cost including interest charges:

Mounting $.05 per set
Dismounting .03 per set

3. DURATION

This agreement shall become effective on January 1, 1924, and may be altered by mutual agreement or termi-

nated upon ninety (90) days' notice in writing from either party to the other.

WESTERN ELECTRIC COMPANY, INCORPORATED.
By (Signed) F. B. JEWETT,
Vice President.
Attest: (Signed) GEO. C. PRATT,
Secretary.

ILLINOIS BELL TELEPHONE COMPANY.
By (Signed) W. R. ABBOTT,
President.
Attest: (Signed) E. G. DREW,
Secretary.

Section 7-(g)

SUPPLEMENTARY AGREEMENT TO

STANDARD SUPPLY CONTRACT

SUBJECT: STORING DIRECTORIES

Standard Agreement supplementing Section 7-(g) of the Standard Supply Contract effective January 1, 1924, between Western Electric Company, Inc., and Illinois Bell Telephone Company.

1. SERVICE

Under Section 7-(g) of the Standard Supply Contract the Electric Company will receive, store and deliver directories to the Telephone Company, in such quantities, in such manner, and at such times as the Telephone Company may reasonably designate.

2. REMUNERATION

For performing such service, the Electric Company will bill the Telephone Company one-half cent (1/2c) per directory for all directories received at the Electric Company's storerooms during the month.

3. DURATION

3.1 This agreement shall become effective on January 1, 1924, and may be altered by mutual agreement or terminated upon ninety (90) days' notice in writing from either party to the other.

3.2 This agreement replaces and cancels Supplementary Agreement executed by the parties hereto effective Janu-

ary 1, 1922, covering Section 6-M of the Standard Supply Contract effective November 1, 1920.

WESTERN ELECTRIC COMPANY, INCORPORATED.
By (Signed) F. B. JEWETT,
Vice President.
Attest: (Signed) GEO. C. PRATT,
Secretary.

ILLINOIS BELL TELEPHONE COMPANY.
By (Signed) W. R. ABBOTT,
President.
Attest: (Signed) E. G. DREW,
Secretary.

CITY'S EXHIBIT 57.

ILLINOIS BELL TELEPHONE COMPANY

PURCHASES FROM WESTERN ELECTRIC COMPANY

	Gross Purchases Entire Co.	Returned Material Entire Co.	Net Entire Co.
Year 1902	$ 1,429,344.52	$ 102,932.35	$ 1,326,412.17
1903	1,145,904.13	50,487.96	1,095,416.17
1904	846,182.57	166,499.74	679,682.83
1905	1,729,998.53	465,235.72	1,264,762.81
1906	3,180,656.73	647,303.85	2,533,352.88
1907	4,384,324.92	899,295.67	3,485,029.25
1908	2,783,008.72	936,030.62	1,846,978.10
1909	2,979,519.21	852,574.46	2,126,944.75
1910	3,554,172.00	895,031.83	2,659,140.17
1911	4,109,385.90	864,903.84	3,244,482.06
1912	4,306,627.30	1,200,997.26	3,105,630.04
1913	6,304,311.69	1,527,982.77	4,776,328.92
1914	7,245,657.95	1,527,485.46	5,718,172.49
1915	4,816,894.19	1,318,324.18	3,498,570.01
1916	6,088,317.57	1,584,303.62	4,504,013.95
1917	8,851,558.18	2,421,523.42	6,430,034.76
1918	4,119,584.00	1,334,634.08	2,784,949.92
1919	5,485,521.68	1,266,048.48	4,219,473.20
1920	6,936,192.22	1,398,758.41	5,537,433.81
1921	12,642,935.33	2,153,894.46	10,489,040.87
1922	13,474,656.88	2,506,755.87	10,967,901.01
1923	13,681,259.46	3,266,000.66	10,415,258.80
1924	16,691,605.26	2,922,121.25	13,769,484.01
1925	22,023,624.24	3,827,577.08	18,196,047.16

CITY'S EXHIBIT 58.

(Page 16)

(14) In July, 1911, the several boards of directors of said five companies, to wit, the Union, Chicago, Michigan State, Wisconsin and Cleveland companies, adopted resolutions in words and figures as follows, to wit:

"Whereas, It is in the opinion of this board desirable for the purpose of greater operating efficiency and economy to include in one operating unit the Wisconsin Telephone Company, the Michigan State Telephone Company, the Chicago Telephone Company, the Central Union Telephone Company and the Cleveland Telephone Company, and at the same time preserve to each its separate corporate existence, and

Whereas, Twenty-five (25) of the officers and others of each of said companies are the same individuals and others will be soon employed:

Therefore, Be It Resolved, That the necessary expense of such action as above set forth be properly and fairly appropriated among the several companies, and that such expense be apportioned severally to the five (5) companies upon the same percentage that each company previously paid for the same officials or purposes.

Be It Further Resolved, That the compensation of any additional officials or heads of departments or other employes brought into this larger operating unit and all expenses of the offices provided for shall be divided among the five (5) companies upon the same basis.

Be It Further Resolved, That all such officials may be paid by check of any one of the five named companies and the sum of such payment may be distributed in accordance with this resolution by the general auditor upon the books of the five (5) companies."

Said five companies since May 1, 1911, have had their administrative headquarters in the City of Chicago, and have had the following officers in common, to wit: President, vice-president, secretary, treasurer, general counsel, general auditor and chief engineer, as well as the various clerks and assistants in each of said departments.

City's Exhibit 59.

(Page 94)

(41) The Western Electric Company is an Illinois corporation organized in the year 1882 and a majority of its stock has at all times been owned by the American Bell Company or the American Company, the amount of such ownership on the several dates mentioned below being as follows:

Year	Stock Issued, (Shares)	Held by said Telephone Cos. Shares	Approx. % of Whole
1882	10,000	5,080	50.8
1883	10,000	5,080	50.8
1884	10,000	5,080	50.8
1885	10,000	5,080	50.8
1886	10,000	5,080	50.8
1887	10,000	5,180	51.8
1888	10,000	5,878	58.8
1889	10,000	5,878	58.8
1890	17,500	10,296	58.8
1891	17,500	10,346	59.1
1892	17,500	10,396	59.4
1893	17,500	10,446	59.7
1894	20,000	11,946	59.7
1895	30,000	17,956	59.9
1896	30,000	17,956	59.9
1897	30,000	17,981	59.9
1898	35,000	20,977	59.9
1899	60,000	36,004	60.0
1900	70,000	42,023	60.0
1901	80,000	48,024	60.0
1902	100,000	60,030	60.0
1903	120,000	72,054	60.0
1904	120,000	72,054	60.0
1905	120,000	72,044	60.0
1906	150,000	90,066	60.0
1907	150,000	90,066	60.0
1908	150,000	119,939	80.0
1909	150,000	120,009	80.0
1910	150,000	120,661	80.4
1911	150,000	120,686	80.5
1912	150,000	144,564	96.4
1913	150,000	144,554	96.4

(Page 94).

(42) The American Bell Company and the American Company have received stock and cash dividends from the Western Electric Company and have paid for stock in the Western Electric Company the amounts shown in the following table

(95)

WESTERN ELECTRIC MANUFACTURING COMPANY

	Shares	Costs
July 5, 1881.....	1,000	$150,000
" 20, "	200	35,000
	1,200	$185.000

Mar. 13, 1882. The above named shares were exchanged, one for two, for shares of the Western Electric Company.

(This Section 42 is continued on the following page.)

WESTERN ELECTRIC COMPANY

		Shares	Cost	Stock Div. Cash Premiums		Cash	Dividends
Mar. 13, 1882	By Exchange	2,400	185,000				
" 13, 1882	Franchise	2,000					
Apr. 4, "	W. E. Mfg. Co. Div.	180		14,138.62			
Aug. 3, 1883		700	70,000		1885	6%	31,680
Oct. 23, 1887		60	7,515		1886	6%	31,680
		5,340	262,515		1887	8%	42,140
Nov. 9, "	Less Sold	50	5,750		1888	13½%	70,980
		5,290	256,765		1889	10%	52,800
Apr. 23, 1888		225	31,500		1890	10%	52,425
" 27, "		100	14,000		1891	8%	73,300
May 5, "		100	14,000		1892	8%	73,600
June 29, "		50	7,000		1893	10%	92,000
Sept. 10, "		213	29,820		1894	10%	101,840
		5,978	353,085		1895	8½%	120,888
Feb. 24, 1889,	Less Sold	50	7,000		1896	8%	126,144
		5,928	346,085		1897	8%	126,144
Oct. 27, 1890	739½)	....	73,950		1898	8%	147,136
Nov. 26, "	739½)	1,479	73,950		1899	8%	162,460
" 12, "	Stock Div. 50%	2,964	.....	136.66	1900	8%	300,450
Sept. 21, 1891		50	7,400		1901	8%	372,540
Apr. 6, 1892		50	8,000		1902	8%	456,642
Aug. 21, 1893		50	8,000		1903	8%	552,762
May 9, 1894	Stock Div. 14-2/7%	1,500		392.80	1904	8%	576,792
Mar. 19, 1895	" " 50 %	6,010			1905	8%	576,792
Feb. 8, 1898	" " 16-2/3%	3,001		820.92			
Aug. 29, 1899	" " 42-6.7%	9,013		186.60			
Sept. 18, "		6,009	600,900				
Aug. 1, 1900		6,009	600,900				
Mar. 6, 1901	Stock Div. 14-2.7%	6,006		693.98			
" 12, 1902	" " 25 %	12,015		562.99			
" 11, 1903	" " 20 %	12,015		577.98	1906	8%	684,924
" 31, 1906		18,022	1,802,200		1907	8%	720,528

(The two thousand (2,000) shares acquired on March 13, 1882, as shown in the second item of the foregoing table, were paid for in cash at par with money received from the Western Electric Company in payment for the contract and license from the American Bell Telephone Company, hereinabove set forth.)

Date	Quarterly Dividend (Cash)	Extra Dividend (Cash)		
Feb. 1, 1907.....	$ 180,132			
May 1, 1907.....	180,132			
Aug. 1, 1907.....	180,132			
Nov. 1, 1907.....	180,132		Total 1907—	$ 720,528
Feb. 1, 1908.....	180,132			
May 1, 1908.....	180,132			
Aug. 1, 1908.....	180,152			
Nov. 2, 1908.....	180,152		Total 1908—	720,568
Feb. 1, 1909.....	239,878			
May 1, 1909.....	239,998			
Aug. 2, 1909.....	239,998			
Nov. 1, 1909.....	239,998		Total 1909—	959,872
Feb. 1, 1910.....	240,018			
May 2, 1910.....	240,058			
Aug. 1, 1910.....	240,158			
Nov. 1, 1910.....	240,158			
Dec. 31, 1910.....	160,881.33	$ 241,322	Total 1910—	1,362,595.33
Mar. 31, 1911.....	241,372			
June 30, 1911.....	241,372			
Sept. 30, 1911.....	241,372			
Dec. 30, 1911.....	241,372	241,372	Total 1911—	1,206,860
Mar. 30, 1912.....	242,732			
June 29, 1912.....	262,124			
Sept. 30, 1912.....	289,118			
Dec. 31, 1912.....	289,128	289,128	Total 1912—	1,372,230
Mar. 31, 1913.....	289,128			
June 30, 1913.....	289,108			
Sept. 30, 1913.....	289,108			
Dec. 31, 1913.....	289,108	289,108	Total 1913—	1,445,560
Mar. 31, 1914.....	290,446			
June 30, 1914.....	290,446			
Sept. 30, 1914.....	290,446		Total 1914—	871,338
Total	$7,598,621.33	$1,060,930		$8,659,551.33

CITY'S EXHIBIT 60.

(Pages 20 to 25 inclusive.)

(Page 96)

(43) On or about February 6, 1882, the American Bell Company entered into an agreement with the Western Electric Company in words and figures as follows:

This Agreement made this sixth day of February, A. D. 1882, by and between The American Bell Telephone Company, a corporation created and existing under the laws of the Commonwealth of Massachusetts, of the first part, and the Western Electric Company, a corporation created and existing under the laws of the State of Illinois, of the second part, Witnesseth:

Whereas said second party desires to be employed by said first party to manufacture the telephones required by it, said first party, and to be licensed to manufacture telephonic appliances and apparatus other than telephones under letters patent now owned or controlled or which may hereafter be owned or controlled by said first party, and whereas said second party owns certain inventions, patents, and rights under patents, relating to telephones and telephonic appliances:

Now, therefore, it is agreed:

1. Said second party agrees that it will, if said first party shall elect to purchase the same at any time within six months from the date hereof, sell, assign and transfer to the first party at the actual cost thereof to it, said second party, either, or any, or all the inventions in electrical speaking telephones, or improvement therein, or applicable thereto, which it, said second party, now owns, and further that it, said second party, will from time to time, if and whenever it shall acquire any inventions in electric speaking telephones, or improvements therein or applicable thereto, forthwith notify said first party thereof and that it will, in case said first party shall elect to purchase the same within six months after such notice, sell, assign and transfer the same to said first party at the actual cost thereof to said second party.

The word "telephone" as used in this contract includes all instruments employed for the electrical transmission of articulate speech, including therein all attachments and devices

which serve to cause, to improve, or to modify the articulating current or the effect thereof.

2. Said first party agrees that it will employ said second party during the existence of this contract to manufacture telphones required by it, The American Bell Telephone Company, whether for use in the United States, or for export, upon the terms and conditions following, that is to say:

Said telephones shall be manufactured only at such of the manufactories of said second party as said first party may from time to time designate.

At all times during their manufacture and upon their completion the instruments and the materials employed shall be subject to the inspection and acceptance of suprintendents and inspectors appointed by said first party.

The price to be paid therefor shall be the acutal cost thereof, with an addition of twenty per cent. of such cost as manufacturer's profit.

Said second party shall promptly manufacture and supply all telephones ordered by said American Bell Telephone Company, and shall provide itself with facilitites for making them in such quantities as the course of business may demand.

Said telephones shall be of such paterns and styles and shall embody such inventions and improvements as said first party may from time to time prescribe and shall be made in all respects as they shall direct as to style, material, workmanship, and finish.

In addition to the patent marks and figures said telephones shall bear such other marks and figures as said American Bell Telephone Company shall from time to time direct and no others.

Said manufacture shall be subject to such regulations as may in the opinion of the first party be necessary for its protection and as it shall from time to time prescribe to said second party.

Except as in this article provided for the second party shall not engage in the manufacture of telephones within the United States.

Said second party faithfully complying with the terms of this employment, said first party agrees that it will during the existence of this contract employ no others to manufacture telephones.

3. Said second party hath granted and doth hereby grant to the first party the sole and exclusive right and license during the full term for which patents thereon have been or

may be granted to make, use and sell, and to license others except only the existing licensed manufacturers of said first party named in Article 4 hereof to make, use and sell in call bells, switches and other telephonic appliances, any inventions or improvements therein which, it said second party, does now or may hereafter own or control, in whole or in part, by contract or otherwise, whether patented or not. "Telephonic appliances" include calls, switches, switch boards, annunciators, exchange furniture and other apparatus and devices adapted for use on or for telephone lines, except telephones as above defined.

The second party agrees that it will from time to time and at all times do, execute, and deliver such other and further acts and instruments, if any, as may be necessary to secure to and vest in said first party such sole and exclusive right and license.

4. Said first party hereby grants and agrees to grant (subject, however, as to invention hereafter directly acquired by said first party to the provisions of clause j of this article) to the second party a license exclusive except as hereinafter stated, upon the terms and conditions and subject to the limitations herein expressed during the full term for which letters patent thereon have been or may be granted to make and to sell call bells, switches and other telephonic appliances as above defined embodying any inventions or improvements thereon which it, said first party, does now or may hereafter own or control (including herein the invention and improvements licensed to it, said first party, by said second party in the previous article hereof); but said second party shall and said second party hereby agrees that it will

(a) Assume and pay or discharge any and all royalties and other obligations which said first party is or may be bound to pay (or perform on or on account of said inventions or any of them).

(b) Within the United States sell such apparatus only to the licensees of telephones of The American Bell Telephone Company and to them at prices not exorbitant or unreasonable, and under the terms and limitatons hereinafter stated. Such prices are to be uniform for the different classes of licensees of said American Bell Telephone Company.

(c) In selling such appliances for use in foreign countries it will in each case retain the title thereto until they are landed in the foreign country to which they are sent; and will

insert in its bill heads therefor the following, or such similar notice as the first party may require, viz:

> "The articles herein named are to remain the property of the Western Electric Company until landed in..... It is understood and agreed to by the purchaser that no right to use the articles herein named in the United States, and no right to use any patents whatever granted by the United States is conveyed hereby, no consideration having been paid for such use"

and will insert in its bill heads for appliances which it is authorized to sell to licensees of The American Bell Telephone Company in the United States the following or such similar notices as the first party may require, viz.:

> "The call bells and other telephonic appliances included in this bill are made under patents which belong to the American Bell Telephone Company or which they have the exclusive right to use, and are only licensed to be used in connection with telephones licensed by said company and at stations using such telephones; and the purchaser by accepting them agrees not to use them otherwise nor to dispose of them to anyone except those so licensed"

and will conform to such other similar regulations as said first party may reasonably require for its protection and may from time to time prescribe to said second party.

(d) Mark such apparatus in addition to the patent numbers and marks with such other numbers, marks, notices, or names, and no others, and in such manner as said first party shall from time to time prescribe.

(e) Promptly manufacture and supply all such apparatus as it is hereby authorized to supply, and of such patterns and styles and embodying such inventions and improvements as may be ordered by the parties to whom it is authorized to dispose of the same; and will provide itself with facilities for making such apparatus in such quantities as the course of business may demand.

(f) Will on the first days of January and July in each year, during the continuance hereof, make full and true returns under oath of all and singular the telephonic appliances and apparatus manufactured hereunder.

(g) And except as in this article provided shall not engage in the manufacture of telephonic appliances within the United States.

(h) The party of the second part agrees that all instruments or apparatus manufactured under this license shall be of the most approved forms and first class in point of material, finish and workmanship and shall be subject to the inspection of the party of the first part.

(i) The license hereby granted is not exclusive as to inventions or improvements in cables, conductors, insulators or the manner of constructing and arranging lines (apart from switches and instruments), and

The rights in this article granted are subject to the existing rights of Post and Company of Cincinnati, Ohio, under contract dated June 27, 1879, with the National Bell Telephone Company; of Davis and Watts of Baltimore, Maryland, under contract; dated June 24, 1879, with the National Bell Telephone Company; of the Electric Merchandising Company under contract dated June 11, 1879, with the National Bell Telephone Company; and (to the manufacturing rights) of the Telephone and Telegraph Construction Company under contract dated October 24, 1877, with Gardner G. Hubbard, Trustee. But the first party agrees that it will within six months after request therefor from said second party give notice to terminate such of said last named contracts as can be so terminated as therein provided; and it is agreed that the second party shall until such termination be entitled to receive all royalties accruing to the first party thereunder after July 1, 1881 (on account of manufactures loss only royalties which said first party may be bound to pay on account thereof).

(j) In case said first party shall hereafter acquire any invention or inventions in telephone appliances as above defined, other than such as it may hereafter acquire by license from the second party under Article 3 hereof, it shall forthwith notify said second party thereof, and such invention or inventions shall in case said second party shall so elect within six months from the date of such notice, come under the provisions of this Article 4 hereof with like effect as if such invention or inventions were now owned by said first party; but the second party, in case it shall elect to have such license, shall forthwith upon making such election repay to said first party the cost of such invention or inventions and assume any and all royalties and other obligations which said first party may be bound to pay (or perform) on or on account of such invention or inventions.

5. Whereas the due prosecution of the business of said

Telephone Company and of its licensees, users of its telephones, requires that telephones and telephonic appliances of the most approved forms and workmanship be promptly furnished and as herein provided, and whereas the said telephone company is unwilling to permit the reasonable expectations of its licensees in this regard to be disappointed, and whereas the time required to ascertain judicially whether the second party shall or shall not have failed to perform its obligations hereunder would cause a delay which might work great irreparable and unascertainable damage to said telephone company and its said licensees, now it is an integral part of this contract and is also a limitation of and an exception to the license hereby granted and the employment hereby contracted for that:

(1) Whenever the directors or executive committee of said telephone company shall be of opinion that the second party has failed in its obligations in this respect; or that there is imminent danger or probability that it will so fail, the said telephone company may without notice or demand, forthwith manufacture or cause to be manufactured elsewhere, either by itself or others, such instruments as in its opinion may be required to meet the emergency, and may continue and prepare to continue such manufacture elsewhere so long as in its opinion may be needful; and for the purpose of obtaining such supply, the opinion of its directors or its executive committee, arrived at in good faith, shall be conclusive as to its right so to obtain a supply elsewhere, and its action based thereon shall not be restrained by any court or judicial power whatever; but such decision shall not terminate this contract and license, nor shall it prevent the second party from furnishing apparatus to any persons who may lawfully order the same according to the terms hereof.

(2) If it shall thereafter be determined by agreement of the parties or by the final judgment of any court of competent jurisdiction that the opinion so acted on by said telephone company was erroneous, then the consequences of such error shall be that said telephone company shall pay to said second party all the profits which it, said second party, would actually have realized and received if such supply so obtained elsewhere had been obtained of said second party and said decision of said telephone company shall not authorize it thereafter to obtain such supply elsewhere.

(3) If it shall be determined by agreement of the parties or by the final judgment of any court of competent jurisdic-

tion that said second party did violate or failed to comply with or has violated or failed to comply with any of the terms of this agreement then this license to manufacture telephone appliances shall be deemed to have been non-exclusive and the obligation to employ the second party to manufacture telephones to have ceased as from the time of such violation or default and said license shall remain non-exclusive and the first party shall be under no obligation to employ the second party to manufacture telephones unless and until said second party shall upon notice from said first party have remedied or repaired such default violation or neglect and shall have repaid and made good to said first party any and all loss, cost, damage and expense occasioned thereby or resulting therefrom, and shall reasonably satisfy said first party that it is prepared and intends to conform hereto, whereupon said license shall again become exclusive and the obligation to employ the second party to manufacture telephones shall revive, such license and such employment being, however, subject to all the terms, conditions, limitations and stipulations, inclusive of this article, herein contained.

6. Existing interferences in cases of inventions in telephonic appliances shall be disposed of as counsel of the parties hereto may advise, to recognize and protect the rights of the several inventors to their respective inventions, subject to the decisions of the patent office.

7. The first party agrees that it will, so long as and in so far as the license herein granted the second party is and shall remain exclusive, consent to the use of its name either alone or together with that of the second party as the case may require, in all such suits as counsel of the parties may advise are necessary or proper for the protection of such rights against infringement, but the whole expense of such litigation shall be borne by the second party.

8. This contract shall remain in force until it shall be determined by the mutual agreement of the parties hereto.

In Witness Whereof, The American Bell Telephone Company has caused these presents to be signed in its name and behalf by William H. Forbes, its president, and its corporate seal to be hereto affixed and the Western Electric Company has caused these presents to be signed in its name and behalf by ....., its....., and its corporate seal to be hereto affixed the day and year first above written.

(Before the execution hereof the following interlineations were made, viz.: on page 3 the word "thereon" and the words "except only the existing licensed manufacturers of said first party named in Article 4 hereof"; on page 4 the words "or perform"; on page 7 at the end of paragraph (i) the words "on account of manufactures less only royalties which said first party may be bound to pay on account thereof" and on page 8 the words "or perform"; also on page 7 the words "to the manufacturing rights.")

THE AMERICAN BELL TELEPHONE COMPANY,
By (Sd) W. H. FORBES,
President.

Ekd (Sd) W. P. M.
(Seal)

WESTERN ELECTRIC COMPANY,
By (Sd) ANSON STAGER,
President.

Attest:
(Sd) S. C. LYNCH,
Secretary.
(Seal)

CITY'S EXHIBIT 61.

(Pages 26-27 inclusive.)

(Page 104.)

(44) Said agreement was modified by a certain memorandum of agreement between said parties dated April 8, 1908, in words and figures as follows:

"Memorandum of an Agreement made this eighth day of April, 1908, between The American Bell Telephone Company, a corporation organized under the laws of Massachusetts, of the first part, and the Western Electric Company, a corporation organized under the laws of Illinois, of the second part, Witnesseth:

That, Whereas, the parties hereto executed on the 6th day of February, 1882, a certain contract relating to the manufacture of telephones and telephonic apparatus and it is desired that certain changes be made in said contract;

Now, Therefore, It is mutually agreed that said contract shall be modified as follows:

1. That clause 2 be modified by striking out the words:
"Except as in this article provided for the second party

shall not engage in the manufacture of telephones within the United States"

and substituting in place thereof the following words:

"Except as in this article provided for the second party shall engage in the manufacture of telephones within the United States only under such restrictions as the first party may from time to time impose."

2. That the following be substituted for paragraph (b) of clause 4:

"Within the United States sell such apparatus to the licensees of telephones of The American Bell Telephone Company at prices not exorbitant or unreasonable and under the terms and limitations hereinafter stated; such prices are to be uniform for the different classes of licensees of said American Bell Telephone Company—and to sub-licensees and non-licensees of said American Bell Telephone Company only under such restrictions as the first party may from time to time impose."

3. That paragraph (c) of clause 4 be cancelled.

4. That the following be substituted for paragraph (d) of clause 4:

"Mark such apparatus in addition to the patent numbers and marks with such other numbers, marks, notices or names and in such manner as said first party shall from time to time prescribe."

5. That the following be substituted for paragraph (f) of clause 4:

"Will, during the continuance hereof, make full and true returns under oath of all and singular telephonic appliances and apparatus manufactured hereunder if and when such return may be required by the first party."

6. That the following be substituted for paragraph (g) of clause 4:

"And except as in this article provided shall engage in the manufacture of telephonic appliances within the United States only under such restrictions as the first party may from time to time impose."

IN WITNESS WHEREOF, the parties hereto have caused their respective corporate seals to be hereto affixed and these pres-

ents to be signed in their names and behalf by their proper officers thereto duly authorized.

THE AMERICAN BELL TELEPHONE COMPANY,
By (Sd) THEO. N. VAIL,
President.

(Sd) G. V. L.
(Seal)
(T. A. B. T. Co.)

Attest:
(Sd) CHAS. EUSTIS HUBBARD, *Clerk.*

WESTERN ELECTRIC COMPANY,
(Sd) E. M. BARTON,
President.

H. B. T.
(Seal)
(W. E. Co.)

Attest:
(Sd) H. A. HALLIGAN, *Secretary.*

CITY'S EXHIBIT 64.

STATE OF ILLINOIS

FILED JUNE 26, 1923.

Chicago Office.

ILLINOIS COMMERCE COMMISSION.

(Copy)

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

New York, March 24th, 1909.

B. E. Sunny, Esq.,
President, Chicago Telephone Company,
Chicago, Illinois.
Dear Mr. Sunny:

I have your letter of the 22nd inst. respecting the connection with independents.

I regret that the matter has been brought up again. I am afraid that it indicates that you have a lingering faith in the policy, and do not accept as a finality our decision that under no circumstances will we connect with any opposition telephone companies.

This is decided and final.

Independent Telephone Companies are an entirely differ-

ent matter, and here it would be well to make a sharp distinction between independents and opposition.

We will approve under a regular service or sub-license contract connection with any independent company not in competition, or with any independent company now in opposition to an exchange of ours where the feature of opposition can be eliminated, but before considering or discussing the subject, the opposition feature must be eliminated.

You speak of the Chicago Company acting within its own territory. From a service standpoint, Chicago has no territory. It is part of a system which extends over the United States and Canada—a system which is as much a whole as if all was operated by one Company. And nothing can be done in one Company which will not affect another. You build up the opposition in the surrounding territory by giving them facilities that they have not, but which we have created and maintained at great expense and oftentimes at little or no profit, and soon we will be building up the opposition at the expense of our own service and our own shareholders.

Yours very truly,

(Signed) THEO. N. VAIL,
President.

CITY'S EXHIBIT 65.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY.

Telephone and Telegraph Building
195 Broadway.

U. N. BETHELL,
Senior Vice President.

New York, July 17, 1918.

Mr. B. E. Sunny, President,
Chicago Telephone Company,
Chicago, Illinois.

Dear Mr. Sunny:

As you know, the original license contract held by your Company has been modified in various particulars, both by letters and, less formally, by the acts of our respective Companies under it, in a way and to an extent which very largely increases the obligations of this Company under the contract.

Some of the obligations of this Company not specifically mentioned in your Company's original license contract but in fact included in it and long since firmly established, which

with the rental of instruments are covered by the 4½% of your gross receipts you are now paying, are briefly outlined below:

1. Service to your Company of the legal and technical experts of this Company in the defense against all actions or suits charging infringement of patents covering the inventions in telephonic devices, apparatus, methods and systems which your Company is licensed to use under its license contract (being all such inventions which this Company can so license) and arising out of any such use that this Company may advise.

2. The right to your Company to use, when completed and standardized and as recommended by this Company, all new and improved telephonic apparatus and developments in the art of telephony resulting from the general work of research, investigation and experimentation carried on by or under the direction of this Company, including plans, methods, systems and ideas developed through such general work; with the obligation in this Company to maintain such an organization for the prosecution of such work as will enable it to be so done as to relieve your Company from the necessity of attempting to to do it for itself; and with the further obligation in this Company to render available for use by your Company such telephonic apparatus and developments, as well as the inventions in telephonic devices, apparatus, methods, and systems, which your Company is licensed to use under its license contract and which are of advantageous and practical usefulness in telephony and recommended by this Company for use.

3. The right to your Company to obtain from this Company advice and assistance in general engineering, plant, traffic, operating, commercial, accounting, patent, legal, administrative and other matters pertaining to the efficient, economical and successful conduct of your Company's telephone business; such advice and assistance to be furnished either through the issuance to your Company of data, discussions and conclusions, including bulletins, books, circular letters, specifications and blue-prints, or, when necessary or desirable, through the performance of special work in cases of unusual magnitude and complexity.

4. The right to your Company to avail of this Company's advice and assistance in the financing by your Company of its requirements for the extension, development and improvement of its telephone system, in securing funds on fair terms for new construction and other expenditures, in marketing its securities, and in the general matter of its finances.

5. The right to your Company, in the prosecution of its welfare work among its employees, to have the cooperation and support of this Company in promoting such work and, subject to the existing agreement between our respective Companies for the interchange of benefit obligations under their respective employees' benefit fund plans, to have recourse to the fund established by this Company under its plan, in case of a deficiency in your Company's fund established under its plan; with the obligation in this Company to maintain its fund at not less than the original amount.

6. The right to your Company to require this Company to replace or repair all telephones furnished under the contract which may become defective and which are returned to this Company for such replacement or repair, and also to furnish the necessary parts for making replacements in any telephone so furnished which your Company may have in service or in stock.

As you also know, this Company has not failed on any occasion to recognize and live up to these obligations, and, therefore, we are glad to restate them in order that they may become a part of your records.

Very truly yours,

U. N. BETHELL,
First Vice President.

CITY'S EXHIBIT 65-A.

ILLINOIS BELL TELEPHONE COMPANY.

Date

To

I hereby certify that the following is a true copy of resolution duly adopted by the Executive Committee of the Illinois Bell Telephone Company at a special meeting duly called and held on July 31, 1918 at which meeting a quorum was present.

.....
Secretary.

The Chairman stated that a letter had been received from the American Telephone and Telegraph Company, dated July 17, 1918, restating in summarized form the obligations of that Company to this Company under the license contract. The letter was read by the Secretary and was ordered spread upon the minutes of this meeting.

CITY'S EXHIBIT 66.

The President presented a letter from the American Bell Telephone Company, reading as follows:

"New York, December 16, 1912.

Mr. B. E. Sunny, President,
Chicago Telephone Company,
Chicago, Illinois.

Dear Sir:

The American Bell Telephone Company hereby offers to substitute the following method of computing total gross earnings in place of the method described in our letter of November 21, 1902, and subsequent interpretations thereof.

The total gross earnings, for the purpose of determining the amount, of which you pay us 4½%, shall comprise the accounts described and defined in our Accountng Circular No. 8 as follows:

Account 500 Subscribers' Station Revenues.
Account 501 Public Pay Station Revenues.
Account 504 Private Exchange Lines.
Account 510 Message Tolls.

From the total of the foregoing shall be deducted—
Account 304 Uncollectible Operating Revenues.

To the difference between the aforesaid revenues and the aforesaid deductions therefrom shall be added:

(a) The sum of seventy-five cents per instrument per month for all instruments not in use in excess of 3% of the total number standing charged to you on the last day of such month (the 3% representing the maximum number believed to be necessary for stock.) This is the present basis as to excess stock.

(b) For sublicensed or other operating telephone companies not directly licensed by this Company in which you own a majority of the stock and which are in effect operated as a part of your telephone system the same proportion of their gross revenues (computed as aforesaid) as the proportion of their stock which you own.

NOTE: On application for the exclusion of such gross revenues of any such subsidiary company the question will be carefully considered and determined on the facts in each case.

The purpose of this offer is to simplify the method of computation and to bring it closely into conformity with the ac-

counting system established by the Interstate Commerce Commission.

This method of computation will take effect January 1, 1913, for those licensees which accept it prior to January 31, 1913. The first bills on the new method of computation will be those rendered early in March 1913.

A suggested form of resolution for the purpose is enclosed herewith. If adopted by your Company kindly have the Secretary send to me a certified copy of such action.

Yours truly,

C. G. DuBois,
Comptroller."

Upon motion duly supported, the following resolution was unanimously adopted:

Resolved: That the offer of the American Bell Telephone Company as expressed in its letter of December 16th, 1912, in reference to the method of determining the amount on which 4½% shall be paid to it by the Chicago Telephone Company, be accepted and that the President be authorized in the name and on behalf of this Company to notify the American Bell Telephone Company of the acceptance of its offer, and that the letter of the President to the American Bell Telephone Company be transcribed in these Minutes.

The reply of the President was as follows:

CITY EXHIBIT 67.

CHICAGO TELEPHONE COMPANY.

Chicago, January 29, 1913.

Mr. Charles G. DuBois, Comptroller,
American Bell Telephone Company,
15 Dey Street, New York.

Dear Sir:

Your letter of the 16th ultimo setting forth a revised basis on which to calculate the payment of 4½% was presented at the regular meeting of the Board of Directors of Chicago Telephone Company held here today.

The Directors present at this Meeting passed a resolution accepting the offer and a certified copy of the resolution will be sent to you by the Secretary.

Yours very truly,

B. E. SUNNY,
President.

City's Exhibit 68.

ILLINOIS BELL TELEPHONE COMPANY

PAYMENTS MADE TO A. T. & T. CO. UNDER THE LICENSE CONTRACT.

	Chicago Exchange	Entire Company
Year 1902		$169,548.31
1903		240,588.95
1904		275,340.48
1905		307,301.95
1906		351,860.68
1907		384,655.88
1908	$ 321,122.58	
1909	355,710.94	
1910	406,771.49	
1911	445,550.72	
1912	492,620.88	
1913	559,347.68	
1914	614,344.92	
1915	666,317.31	
1916	747,608.84	
1917	827,658.15	
1918	851,825.69	
1919	1,004,807.08	
1920	1,216,026.15	
1921	1,529,443.46	
1922	1,606,810.39	
1923	1,724,250.54	
1924	1,860,437.62	
1925	1,987,534.39	

City's Exhibit 69.

ILLINOIS BELL TELEPHONE COMPANY

AVERAGE NUMBER OF TELEPHONE SETS

(BASED ON TOTAL NUMBER OF RECEIVERS AND TRANSMITTERS DIVIDED BY TWO)

	Chicago	Entire Company
Year 1912	313,451	390,425
1913	363,154	447,512
1914	418,598	512,644
1915	433,537	527,360
1916	479,031	577,740
1917	521,349	632,721
1918	540,928	655,718
1919	565,504	686,179
1920	607,673	747,010
1921	636,037	901,546
1922	645,767	899,847
1923	714,230	1,011,617
1924	777,246	1,100,012
1925	837,240	1,185,635

City's Exhibit 70.

ILLINOIS BELL TELEPHONE COMPANY

CHICAGO EXCHANGE

AVERAGE NUMBER OF STATIONS IN SERVICE

Year 1919	525,621
1920	559,226
1921	589,901
1922	615,788
1923	660,927
1924	714,993
1925	762,024

City's Exhibit 71.

ILLINOIS BELL TELEPHONE COMPANY

ANNUAL PAYMENTS TO A. B. T. CO. AND A. T. & T. CO. FOR LICENSEE REVENUE—DR.

Year	Amount
1881	$ 48,394.05
1882	40,328.31
1883	47,523.94
1884	53,627.54
1885	56,826.84
1886	62,076.43
1887	69,922.73
1888	74,190.92
1889	80,672.79
1890	91,058.93
1891	103,523.03
1892	121,126.51
1893	142,604.29
1894	100,471.80
1895	95,006.74
1896	103,360.85
1897	108,310.38
1898	114,662.28
1899	118,756.81
1900	149,813.16
1901	192,131.22
1902	169,548.31
1903	240,588.95
1904	275,340.48
1905	307,301.95
1906	351,860.68
1907	384,655.88
1908	382,637.02
1909	424,123.83
1910	484,930.39
1911	537,585.12
1912	596,769.73
1913	674,123.66
1914	734,986.58
1915	792,489.06
1916	888,517.75
1917	984,687.63
1918	1,018,664.21
1919	1,197,122.08
1920	1,471,411.40
1921	2,038,899.20
1922	2,151,467.06
Total	$18,082,100.52

CITY EXHIBIT 72.

ILLINOIS BELL TELEPHONE COMPANY.

February 21, 1922.

Mr. C. A. Heiss, Comptroller,
American Telephone & Telegraph Co.,
New York City.

I hereby certify that the following is a true copy of resolution duly adopted by the Board of directors of the Illinois Bell Telephone Company at a regular meeting duly called and held on February 21, 1922, at which meeting a quorum was present.

E. G. DUNN,
Secretary.

A letter dated February 3, 1922, from the American Telephone and Telegraph Company was presented, suggesting that the accounting practice under its existing license contract with this company be modified, (1) so that major parts delivered to this company for replacements in telephones in service or on hand will not be charged to it when so delivered and credited to it when returned, but will in all respects be treated as minor parts are now treated under the same circumstances, and (2) so that the statement by this company for each calendar month shall show the number of telephones in use and in stock in its territory on the last day, instead of on the 15th day of each month.

Resolved: That such modifications of the accounting practice be accepted and that the President be authorized in the name and in behalf of this company to notify the American Telephone and Telegraph Company of the acceptance thereof, and, to consent to such changes in said license contract as may be necessary to make it conform thereto.

CITY'S EXHIBIT 73.

(SEAL)

(ANNUAL REPORT OF THE DIRECTORS OF THE AMERICAN TELEPHONE & TELEGRAPH COMPANY FOR THE YEAR ENDING DECEMBER 31, 1902.) (Page 10.)

During the past year by agreement between this company and the operating companies with which it has contracts a new and simpler plan for determining the amount to be paid this company as rental for telephones has been adopted, which plan involved a substantial reduction in the rentals paid to this company from and after January 1, 1902. This modification of the rental arrangement was clearly justified by the existing conditions. It is believed that it will work to the advantage not only of the operating companies but of this company.

If this reduction in rentals had not been made the amount carried to surplus on the books of this company for the year 1902 would have been substantially greater.

CITY EXHIBIT 73a.

ILLINOIS BELL TELEPHONE COMPANY.

Date

To

I hereby certify that the following is a true copy of resolution duly adopted by the Board of Directors of the Illinois Bell Telephone Company at an adjourned regular meeting duly called and held on January 9, 1903, at which meeting a quorum was present.

.....

Secretary.

A letter dated November 29, 1902, received from Mr. F. P. Fish, President of the American Bell Telephone Company, enclosing a letter dated November 21, 1902, from The American Bell Telephone Company, was presented by President Sabin, offering to substitute for the amount payable by this Company under its license contracts by way of rental upon

telephone instruments, four and one-half per cent (4½%) of the total gross earnings of this Company, as defined by said letter, and the memorandum appended thereto, and thereupon, on the motion of Mr. Lincoln, seconded by Mr. Sprague, it was

Voted: That such offer be accepted and that the President be authorized in the name and behalf of this Company to notify The American Bell Telephone Company of the acceptance thereof.

Upon motion of Mr. Lincoln, duly seconded, it was voted that the letter referred to from The American Bell Telephone Company, dated November 21, 1902, be spread at length upon the records, which letter is as follows:

The American Bell Telephone Company,
No. 125 Milk Street,
Boston, November 21, 1902.

Chicago Telephone Company,
Chicago, Illinois.

The American Bell Telephone Company hereby offers until further notice to substitute for the rental upon Telephone Instruments (magneto telephones and battery transmitters) payable by you under its license contracts held by you and circulars in modification thereof, four and one-half per cent (4½%) of the total gross earnings of your Company, and of any sub-companies through which you may operate, from exchange, toll and private line business and from all other business, done in your territory in the operation of which telephones are now or may hereafter be used, including your receipts from sub-licensees. If in any case you have acquired, or shall hereafter acquire, any interest in a sub-licensee company operating in your territory, a portion of the total gross earnings of such company proportionate to your said interest shall be treated as a part of your total gross earnings in lieu of a like proportion of your actual receipts from that Company. The amount due for each month will be determined by the total gross earnings of the second preceding month computed as herein provided.

Said percentage will cover all instruments in use by you or under your authority in your territory, including instruments used on switchboards or for other operating purposes, and those for which no consideration is received by you, and also will cover those in stock, which last are not to exceed three

per cent (3%) of the total number charged to you. It is understood that you will use your best endeavors to limit the number of instruments to the needs of the service.

All instruments charged to you on the last day of any month in excess of the number in use and such three per cent in stock will be rated as earning seventy-five cents per month each instrument, and the amount of such rated earnings will be included in your total gross earnings for that month in determining the amount to be paid by you.

A statement, over the signature of the proper accounting officer, of your total gross earnings for each calendar month, computed as herein provided, with the number of instruments in use and in stock in your territory on the last day of that month, must be sent to the Treasurer of this Company on or before the last day of the next succeeding month, and payment in Boston or New York funds be made on or before the tenth day of the following month, that being the month for which such payment is due.

Further statements of instruments will be made by you at such times and in such detail as this Company may from time to time require.

You are requested to give us early notice of your receipt and acceptance hereof, with a certified copy of the vote of your directors authorizing such acceptance. This offer when accepted will not become binding until this Company shall declare the plan effective, and upon such declaration shall take effect as of January 1, 1902. It shall not be construed to interfere with any adjustments of rental to which you may be entitled for periods previous to said date.

In order that the method of computing total gross earnings may be uniform, the memorandum hereto appended is to be read as part of this letter.

Yours respectfully,

(Signed) C. JAY FRENCH,
General Manager.

MEMORANDUM.

In determining the total gross earnings hereinbefore referred to, the following special cases shall be treated as hereinafter indicated and methods of accounting for this purpose should be arranged accordingly. There shall be included in

such total gross earnings the value of service, rebates or discounts allowed:

(a) To corporations, other than public corporations, or to firms or persons, in return for pay station privileges, transportation, pole locations, attachments, rights of way, advertising, retainers and services, and generally in consideration of rights or value of any kind.

(b) To municipal or other public corporations, in satisfaction of taxes, assessments or rates legally imposed.

(c) To municipal or other public corporations in return for franchises, rights of way, pole locations, and generally for rights and privileges of any kind, or as a matter of courtesy or required by municipal or public regulation, except as provided above in (b). Instruments furnished as indicated in (a) or (b) above are to be rated as earning your standard rates for like equipment and service. Instruments furnished as indicated in (c) are to be rated as earning seventy-five cents per month per instrument for local service, except in cases where an amount in excess of said sum is received in cash.

There shall not be included in such total gross earnings free service, rebates or discounts allowed:

(d) As a matter of courtesy, except as provided above in (c).

(e) To charitable, religious or educational institutions.

(f) To officers and employees of the company, but not allowed as full or part compensation for services.

(g) On toll charges, either by deductions from bills or by discount on coupons regularly issued when given under rules of the company.

(h) On account of defective service.

(i) On uncollectible accounts.

CITY'S EXHIBIT 74.

STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION
Filed June 13, 1923
Chicago Office

DISTRICT COURT OF THE UNITED STATES
District of Massachusetts.
IN EQUITY.

Western Union Telegraph Company, *et al.*,
v.
American Bell Telephone Company.

EXHIBIT E.

Defendant's Discharge.

(Filed with the Master December 28, 1905.)

And now comes the defendant and says:

1. The evidence introduced with respect to each and every item of the plaintiffs' charge is insufficient to show that the defendant is under obligation to account to the plaintiffs for the stock or moneys claimed in said item or any part thereof.

2. The contract of Nov. 10, 1879, does not require the defendant to account to the plaintiffs except for "twenty per cent. of all rentals or royalties actually received or rated as paid in accordance with the provisions of this contract, from licenses or leases for speaking telephones (exclusive of call-bells, batteries, wires, and other appliances, or services furnished or performed)." None of the stocks or moneys claimed by the plaintiffs was rental or royalty received or rated as paid in accordance with the provisions of said contract, nor was any portion of said stock or moneys received by the defendant in lieu of such rental or royalty. The defendant has already accounted to the plaintiffs for all rentals or royalties received by it or rated as paid to it, in strict accordance with the provisions of Article 18 of said contract relating to such accounting.

3. The stocks and moneys claimed by the plaintiffs in said charge were received by the defendant in return for property, options and other rights possessed by the defendant on Nov. 1, 1879, or for considerations other than the licensing of tele-

phones, and, under the terms of said contract as interpreted in the opinion of the Circuit Court of Appeals, the defendant is not liable for the same or any part thereof.

4. If any portion of the stocks or moneys claimed by the plaintiffs in said charge shall be determined to be rental or royalty from licenses or leases for speaking telephones, under the terms of said contract, a commission or allowance of thirty per cent. upon such portion, must under the provisions of said contract, be credited to the defendant.

5. Under the provisions of said contract of Nov. 10, 1879, the right of the plaintiffs to share in rentals or royalties from licenses or leases for speaking telephones ceased on Nov. 1, 1896. If any portion of the stocks or moneys claimed by plaintiffs in said charge is determined to have been rentals or royalties from licenses or leases for speaking telephones, under the provisions of said contract, or to have been received in lieu of such rentals or royalties, the plaintiffs are entitled only to twenty percent. of the dividends and income received by the defendant therefrom prior to Nov. 1, 1896. If, instead of sharing in said income, the plaintiffs are entitled to receive any part of the principal, an apportionment thereof must be made between the temporary period ending Nov. 1, 1896, and the period beginning on that date, and the plaintiffs are entitled to share only in the portion properly attributable to said temporary period.

6. The defendant has heretofore, acting upon the interpretation of the contract of Nov. 10, 1879, which it believed and still believes to be correct, accounted to the plaintiffs for certain annual cash receipts which, under its interpretation of said contract, were rentals and royalties and constituted all the rentals and royalties received by or rated as paid to the defendant from licenses or leases for speaking telephones. If it be determined that the defendant is under obligation to account for anything other than said annual cash receipts, the accounts heretofore rendered by the defendant to the plaintiffs must be reopened and revised, and the defendant under the revised interpretation of said contract, must be credited in the present accounting with

(1) One-fifth of certain commissions amounting to $1,288,682.14 allowed by the defendant between June 30, 1885, and Nov. 1, 1896, to its operating companies and not heretofore charged to the plaintiffs because of the defendant's understanding of said contract, together with proper interest allowances upon said credits. A schedule

of said payments is hereto annexed marked "Exhibit A."

(2) One-fifth of all cash contributions made by the defendant to its operating companies and not heretofore charged to the plaintiffs because of the defendant's understanding of said contract, together with proper interest allowances upon said credits. The following is a schedule of such contributions:

Bell Telephone Co. of Buffalo	July	16, 1886	$27,500.25
Central Pennsylvania Telephone Co.	Sept.	22, 1886	2,440.53
Colorado Telephone Co.	Dec.	31, 1888	4,618.36
Cumberland Telephone & Telegraph Co.	Aug.	18, 1891	26,600.00
Empire State Telephone Co.	June	16, 1891	1,475.00
Great Southern Telephone Co.	Aug.	26, 1892	16,845.40
Hudson River Telephone Co.	July	24, 1893	9,205.00
Rocky Mountain Bell Telephone Co.	March	5, 1889	997.50
Rocky Mountain Bell Telephone Co.	March	5, 1890	3,557.15
Southern New England Telephone Co.	Dec.	31, 1889	23,625.00
Southern New England Telephone Co.	May	26, 1891	10,000.00

(3) Thirty per cent. of all payments heretofore made to the plaintiffs on account of telephones used in district or exchange systems owned in whole or in part by the defendant or by auxiliary corporations or organizations in which it was interested, being the commissions and allowances to which the defendant is entitled under the provisions of said contract of Nov. 10, 1879, and not heretofore charged to the plaintiffs because of the defendant's understanding of said contract, together with proper interest allowances upon said credits.

(4) Such portions of the cash payments heretofore made to the plaintiffs as were, under the provisions of said contract of Nov. 10, 1879, received by the defendant for considerations other than the mere licensing of telephones, together with proper interest allowances upon such credits.

By its Attorneys,

ROPES, GRAY & GORHAM.

"EXHIBIT A"

Nov. 1, 1885	$ 11,900.66		Nov. 1, 1890	$ 39,669.21	
Feb. 1, 1886	37,374.38		Feb. 1, 1891	40,207.64	
May 1, "	30,031.08		May 1, "	33,085.37	
Aug. 1, "	48,531.36		Aug. 1, "	43,769.33	
Nov. 1, "	39,196.78		Nov. 1, "	33,577.15	
Feb. 1, 1887	34,996.67		Feb. 1, 1892	46,911.14	
May 1, "	33,377.55		May 1, "	38,587.68	
Aug. 1, "	35,306.47		Aug. 1, "	37,593.24	
Nov. 1, "	29,208.54		Nov. 1, "	38,769.06	
Feb. 1, 1888	30,998.68		Feb. 1, 1893	45,139.48	
May 1, "	36,332.32		May 1, "	41,003.03	
Aug. 1, "	33,143.54		Aug. 1, "	39,446.47	
Nov. 1, "	30,585.72		Nov. 1, "	42,587.04	
Feb. 1, 1889	40,423.91		Feb. 1, 1894	43,240.19	
May 1, "	34,294.78		May 1, "	28,583.11	
Aug. 1, "	37,596.09		Aug. 1, "	619.56	
Nov. 1, "	35,171.19		Nov. 1, "	212.23	
Feb. 1, 1890	43,271.32		Feb. 1, 1895	10.87	
May 1, "	37,832.60				
Aug. 1, "	36,096.70				
				$1,288,682.14	

CLERK'S CERTIFICATE.

UNITED STATES OF AMERICA,
District of Massachusetts, ss.

I, WILLIAM NELSON, Clerk of the District Court of the United States for the District of Massachusetts, and now custodian of the records of the Circuit Court of the United States, District of Massachusetts, Under Act of Congress designated as "The Judicial Code," (Chapter 13, Sec. 289) approved March 3, 1911, which took effect January 1, 1912, certify that the foregoing is a true copy of Exhibit E and Exhibit E2 attached to the Master's Report which was filed in said Circuit Court on the 21st day of August, A. D. 1909, in the cause in equity entitled,
No. 89.

Western Union Telegraph Company, *et al.*,
v.
American Bell Telephone Company,
Defendant.

in said Circuit Court determined.

IN TESTIMONY WHEREOF, I hereunto set my hand and affix the seal of said District Court, at Boston, in said District, this eighth day of November, A. D. 1915.

(Seal) (Signed) WILLIAM NELSON.
Clerk.

(Revenue Stamp)

CITY'S EXHIBIT 75.

STATE OF ILLINOIS

FILED JUNE 13, 1923.

Chicago Office.

ILLINOIS COMMERCE COMMISSION.

DISTRICT COURT OF THE UNITED STATES,

DISTRICT OF MASSACHUSETTS.

89 IN EQUITY.

WESTERN UNION TELEGRAPH COMPANY, *et al.*
v.
AMERICAN BELL TELEPHONE COMPANY.

EXHIBIT E2.

Amendment to Defendant's Discharge.
(Filed with Master November 20, 1907.)

And now comes the defendant and moves to amend its discharge heretofore filed before said master by adding to Article 6 thereof the following:

(5) Such allowance as may be determined to be equitable for expenses incurred by defendant in behalf or for the benefit of its licensee companies for the purpose of increasing the value and earning power of any stocks to which or to the dividends upon which the plaintiffs may be entitled; for rights under patents (not relating to the telephone instrument) and other rights granted or permitted to said companies without compensation for the same purpose; for services performed for said companies without compensation for the same purpose, no compensation or reimbursement for such services, rights or expenses having been required by defendant from said companies because of its understanding under its interpretation of the contract of Nov. 10, 1879, that it was the owner of all such stocks.

By its attorneys,

ROPES, GRAY & GORHAM.

CITY'S EXHIBIT 76.

ILLINOIS BELL TELEPHONE COMPANY.

Exhibit #42—Advances made by American Telephone & Telegraph Company and Associated and Subsidiary Companies to Chicago Telephone Company and Illinois Bell Telephone Company. Years 1881 to 1925.

Exhibit 43—Advances made by Chicago Telephone Company and Illinois Bell Telephone Company to American Telephone and Telegraph Company and Associated and Subsidiary Companies. Years 1881 to 1925.

Exhibit #44—Amounts borrowed by Chicago Telephone Company and Illinois Bell Telephone Company from banks. Years 1881 to 1925.

ILLINOIS BELL TELEPHONE COMPANY.

EXHIBIT #42.

Advances made by American Telephone and Telegraph Company and Associated and Subsidary Companies to Chicago Telephone Company and Illinois Bell Telephone Company. Years 1881 to 1925.

Sheet #1

ILLINOIS BELL TELEPHONE COMPANY

ADVANCES FROM AMERICAN TELEPHONE AND TELEGRAPH COMPANY
DURING YEARS 1881 TO 1925

Exhibit #42

Date	Amount	Int. Rate	Payments		Balance at end of Month
			Date	Amount	
3/12/07	$ 750,000.00	6½%		$	$ 750,000.00
			8/19/07	750,000.00	.....
2/15/08	1,250,000.00	6½%			1,250,000.00
			5/18/08	100,000.00	1,150,000.00
			6/ 6/08	540,000.00	610,000.00
			5/31/08	200,000.00	410,000.00
			4/ 3/08	100,000.00	
			4/ 9/08	100,000.00	
			4/24/08	100,000.00	110,000.00
			5/16/08	110,000.00	.....
9/ 2/13	200,000.00	6% Less 2%			
9/24/13	300,000.00	"			500,000.00
10/ 1/13	1,500,000.00	"			2,000,000.00
11/ 1/13	450,000.00	"	11/24/13	2,450,000.00	.....
2/ 1/17	500,000.00	"			500,000.00
			3/ 1/17	500,000.00	.....
6/ 2/19	500,000.00	"			
6/30/19	600,000.00	"			1,100,000.00
9/30/19	500,000.00	"			1,600,000.00
12/31/19	1,000,000.00	"	12/31/19	1,327,769.05	1,272,230.95
6/23/20	500,000.00	"			
9/ 1/20	500,000.00	"			
9/30/20	500,000.00	"	9/30/20	500,000.00	2,272,230.95
10/18/20	2,500,000.00	"			
10/31/20	350,000.00	"			5,122,230.95
12/ 1/20	700,000.00	"	12/20/20	1,822,230.95	4,000,000.00
2/ 1/21	400,000 00	"			4,400,000.00
8/24/21	2,450,000.00	"	8/24/21	6,850,000.00	.....
2/ 2/22	1,500,000.00	6% Less 2%			1,500,000.00
3/ 1/22	300,000.00	"			
3/ 6/22	1,000,000.00	"			2,800,000.00
5/31/22	1,000,000.00	"			3,800,000.00
6/ 2/22	300,000.00	"			
6/30/22	1,000,000.00	"	6/30/22	4,934,150.00	163,860.00
			7/15/22	16,230.00	149,600.00
8/ 3/22	500,000.00	"			
8/28/22	100,000.00	"			749,600.00
			9/30/22	749,600.00	.....
3/30/23	800,000.00	"			800,000.00
6/ 4/23	850,000.00	"			1,650,000.00
6/ 4/23	1,000,000.00	"	6/30/23	2,650,000.00	.....

Sheet #1

ILLINOIS BELL TELEPHONE COMPANY

ADVANCES FROM AMERICAN TELEPHONE AND TELEGRAPH COMPANY
DURING YEARS 1881 TO 1925

Exhibit #12

Date	Amount	Int. Rate	Payments		Balance at end of Month
			Date	Amount	
Carried Forward ...	$			$	$ .....
6/30/23					.....
3/31/25	1,056,055.86	6% Less 2%			1,056,055.86
5/ 1/25	500,000.00	"			
5/29/25	1,300,000.00	"			2,856,055.86
6/ 1/25	1,250,000.00	"			
6/30/25	2,000,000.00	"			6,106,055.86
			7/20/25	4,000,000.00	2,106,055.86
8/27/25	500,000.00	"			2,060,055.86
			9/30/25	500,000.00	2,106,055.86
			10/ 9/25	106,055.86	2,000,000.00
			10/15/25	500,000.00	1,500,000.00
12/ 1/25	1,500,000.00	"			3,000,000.00

ILLINOIS BELL TELEPHONE COMPANY

ADVANCES FROM ASSOCIATED & SUBSIDIARY TELEPHONE COMPANIES

YEARS 1881 to 1925

Exhibit #42

Date	Name of Company	Amount	Int. Rate	Payments		Balance at end of Month
				Date	Amount	
8/ 7/88	Central Union Tel. Co.....	$ 30,000.00	5%		$.....	$ 30,000.00
				1/22/89	30,000.00	.....
12/ 1/20	* "	15,530,179.39	5%			15,530,179.39
				6/28/23	15,530,179.39	.....

*Covers purchase of Illinois Division of Central Union Telephone Company property.

ILLINOIS BELL TELEPHONE COMPANY

ADVANCES FROM WESTERN ELECTRIC COMPANY, INC.

YEARS 1881 TO 1925

Exhibit #C

Date	Amount	Int. Rate	Payments		Balance at end of Month
			Date	Amount	
7/11/1900	$ 300,000.00	Not available		$	$ 300,000.00
			10/11/1900	300,000.00	.....
1/19/1901	275,000.00	"			275,000.00
			4/19/1901	275,000.00	.....
12/31/06	500,000.00	"			500,000.00
1/ 4/07	500,000.00	"			1,000,000.00
			3/11/07	200,000.00	800,000.00
4/11/07	400,000.00	"			1,200,000.00
6/ 1/07	2,000,000.00	6%	6/13/07	800,000.00	2,400,000.00
			8/21/07	500,000.00	
			8/22/07	100,000.00	
			8/24/07	300,000.00	1,500,000.00
			10/28/07	110,000.00	1,390,000.00
11/11/07	300,000.00	6%			1,690,000.00
1/17/08	200,000.00	"			1,890,000.00
			12/11/07	5,000.00	1,885,000.00
			2/17/08	745,000.00	
			2/18/08	640,000.00	500,000.00
			3/11/08	300,000.00	200,000.00
			5/16/08	200,000.00	.....
9/ 9/18	390,000.00	6%			390,000.00
			10/ 2/18	390,000.00	.....

ILLINOIS BELL TELEPHONE COMPANY.

EXHIBIT #43.

Advances made by Chicago Telephone Company and Illinois Bell Telephone Company to American Telephone and Telegraph Company and Associated and Subsidiary Companies. Years 1881 to 1925.

Sheet #1

ILLINOIS BELL TELEPHONE COMPANY

ADVANCES TO AMERICAN TELEPHONE AND TELEGRAPH COMPANY
YEARS 1881 TO 1925

Exhibit #43

Date	Amount	Int. Rate	Payments Date	Payments Amount	Balance at end of Month
12/ 1/13	$7,550,000.00	5½%		$	$7,550,000.00
			12-1913	200,000.00	7,350,000.00
			1/ 3/14	500,000.00	
			1/31/14	500,000.00	6,350,000.00
			3/ 9/14	600,000.00	
			3/31/14	600,000.00	5,150,000.00
			4/30/14	150,000.00	5,000,000.00
6/ 1/14	1,500,000.00	5½%	6/ 1/14	2,500,000.00	
			6/30/14	750,000.00	3,250,000.00
			7/31/14	250,000.00	3,000,000.00
			9/30/14	500,000.00	2,500,000.00
12/ 1/14	2,000,000.00	5½%	12/ 1/14	2,000,000.00	
			12/31/14	500,000.00	2,000,000.00
			2/ 1/15	500,000.00	1,500,000.00
			6/28/15	500,000.00	1,000,000.00
			12/31/15	500,000.00	500,000.00
			4/ 3/16	500,000.00	.....
9/30/16	1,000,000.00	5½%			1,000,000.00
			12/ 1/16	500,000.00	500,000.00
			1/ 2/17	500,000.00	.....
8/24/21	3,053,000.00	8% Less 2%			3,053,000.00
			10/ 3/21	1,000,000.00	2,053,000.00
			12/ 1/21	1,000,000.00	
			12/31/21	1,053,000.00	.....
2/ 6/23	500,000.00	6% Less 2%			
2/13/23	500,000.00	6% Less 2%			1,000,000.00
			3/20/23	1,000,000.00	.....
6/28/23	510,780.33	5.53%			
6/29/23	10,767,240.33	"	6-1923	576,162.92	10,701,857.74
7/ 3/23	591,160.66	"	7/ 2/23	503,157.09	
7/10/23	75,204.92	"	7/ 5/23	23,108.61	
7/16/23	115,389.62	"	7/ 6/23	43,209.03	
7/20/23	13,049.73	"	7/ 9/23	9,047.50	
7/23/23	512,118.03	"	7/13/23	108,630.01	
7/24/23	128,545.57	"	7/17/23	3,019.17	
7/27/23	28,128.52	"	7/19/23	10,066.67	
7/31/23	33,165.90	"	7/20/23	503,402.78	
			7/23/23	122,881.11	
			7/26/23	28,213.90	
			7/27/23	27,210.00	
			7/31/23	5,040.97	10,811,633.85

Sheet #2

ILLINOIS BELL TELEPHONE COMPANY

ADVANCES TO AMERICAN TELEPHONE AND TELEGRAPH COMPANY
YEARS 1881 TO 1925

Exhibit #43

Date	Amount	Int. Rate	Payments Date	Payments Amount	Balance at end of Month
Carried Forward					
7/31/23	$			$	$10,811,633.85
8/ 8/23	17,100.33	5.53%	8/ 2/23	5,042.36	
8/27/23	90,718.03	"	8/ 6/23	3,027.08	
			8/ 7/23	8,073.33	
			8/20/23	2,021.94	
			8/21/23	1,011.11	
			8/24/23	85,979.86	
			8/28/23	1,012.08	10,813,284.45
9/ 7/23	135,230.16	5.53%	9/ 4/23	10,125.00	
9/18/23	67,695.63	"	9/ 6/23	121,583.53	
			9/10/23	13,178.75	
			9/12/23	1,014.03	
			9/15/23	1,014.17	
			9/17/23	50,736.11	
			9/21/23	10,152.78	10,808,406.07
10/ 3/23	17,204.37	5.53%	10/ 1/23	4,066.67	
10/17/23	35,474.32	"	10/ 2/23	3,050.00	
10/18/23	500,000.00	6% Less 2%	10/ 8/23	2,635.28	
10/24/23	21,300.66	5.53 "	10/ 9/23	7,120.56	
10/24/23	500,000.00	6% Less 2%	10/16/23	25,468.75	
10/26/23	200,000.00	"	10/22/23	20,383.33	
			10/24/23	1,019.86	
			10/30/23	10,206.95	
			10/31/23	3,062.50	12,005,971.52
11/ 1/23	14,212.68	5.53%	11/ 5/23	6,128.33	
11/21/23	17,295.41	"	11/ 7/23	1,021.67	
11/30/23	325,135.07	"	11/12/23	1,020.83	
			11/13/23	7,145.83	
			11/14/23	10,226.38	
			11/15/23	3,068.33	
			11/16/23	2,045.83	
			11/20/23	7,160.96	12,324,796.52
			12/ 1/23	1,200,000.00	
			12/31/23	11,124,796.52	.....
1/ 2/24	1,000,000.00	6% Less 2%			1,000,000.00
3/ 4/24	11,235,462.14	5.53%	3/ 3/24	500,000.00	11,735,462.14
3/31/24	793,114.00	6% Less 2%			12,528,576.14
			4/ 2/24	1,000,000.00	11,528,576.14
			5/ 3/24	500,000.00	11,028,576.14
			6/ 2/24	1,500,000.00	
			6/30/24	700,000.00	8,828,576.14
			7/ 1/24	1,000,000.00	7,828,576.14
			8/30/24	500,000.00	7,328,576.14
			9/30/24	500,000.00	6,828,576.14
			10/ 1/24	1,000,000.00	5,828,576.14
			12/ 1/24	2,000,000.00	
			12/31/24	1,384,632.00	2,443,944.14
			1/31/25	500,000.00	1,943,944.14
			3/ 9/25	500,000.00	
			3/13/25	500,000.00	
			3/31/25	943,944.14	

Exhibit #43

ILLINOIS BELL TELEPHONE COMPANY

ADVANCES TO ASSOCIATED AND SUBSIDIARY TELEPHONE COMPANIES
YEARS 1881 TO 1925 INCLUSIVE

Date	Name of Telephone Company	Amount	Interest Rate	Payments		Balance at end of Month
				Date	Amount	
11/10/92	Bell Telephone Co. of Mo.....	$ 50,000.00	5%		$ 50,000.00	
11/21/92	" " " "	25,000.00	5%		25,000.00	
2/ 8/93	Missouri and Kansas Tel. Co.....	20,000.00	6%	3/31/96	20,000.00	
2/21/93	Bell Telephone Co. of Mo.....	15,000.00	5%	7/ 5/93	15,000.00	
3/ 4/93	Mo. and Kansas Tel. Co.....	40,000.00	5%		40,000.00	
3/15/93	"	25,000.00	Not available	3/31/96	25,000.00	
4/15/93	"	20,000.00	6%	3/31/96	20,000.00	
5/15/93	Bell Telephone Co. of Mo.....	20,000.00	5%		20,000.00	
5/25/93	"	35,000.00	5%		35,000.00	.....
10/22/94	Central Union Telephone Co.....	35,000.00	4%			35,000.00
	"			7/ 5/95	35,000.00	.....
11/26/98	"	50,000.00	4%			50,000.00
12/ 3/98	"	50,000.00	"			100,000.00
	"			3/10/99	100,000.00	.....
12/ 9/1910	"	300,495.78	5%			300,495.78
	"			12/18/1911	300,495.78	.....
4/ 1/1912	"	* 162,500.00	6%			
4/ 1/1912	"	* 1,287,500.00	5%			
4/25/1912	"	* 250,000.00	"			
4/26/1912	"	* 300,000.00	"			
4/ 1/12	"	** 2,300,000.00	"			
"	"	** 712,500.00	"			
4/25/12	"	** 437,500.00	6%			
4/26/12	"	** 300,000.00	"			
4/27/12	"	** 800,000.00	"			
4/29/12	"	** 1,000,000.00	"			
4/30/12	"	** 2,000,000.00	"			

4/ 1/12	"	.....	***	1,500,000.00	5%		
4/ 5/12	"	.....	***	350,000.00	6%		
4/25/12	"	.....	***	200,000.00	6%		
4/26/12	"	.....	***	200,000.00	"		
4/27/12	"	.....	***	200,000.00	"		
	"						12,000,000.00
	"					6/ 9/12	500,000.00
	"					6/29/12	500,000.00
	"						11,000,000.00
	"					9/30/12	400,000.00
	"						10,600,000.00
	"					12/30/12	300,000.00
	"						10,300,000.00
	"					6/ 2/13	700,000.00
	"						9,600,000.00
	"					7/ 1/13	300,000.00
10/ 1/13	"	.....	****	1,000,000.00	6%		9,300,000.00
	"						10,300,000.00
	"					11/24/13	2,450,000.00
	"						7,850,000.00
	"					12/ 1/13	7,550,000.00
						12/ 2/13	300,000.00
11/ 1/17	Crown Point Tel. Co.....			4,000.00	6%		.....
	"						4,000.00
	"					1/13/22	1,000.00
							3,000.00
3/29/24	Central Union Tel. Co.....			60,000.00	6%	5/22/23	3,000.00
	"						.....
	"						60,000.00
						5/17/24	34,595.00
6/30/24	"	.....		60,000.00	6%	5/23/24	25,405.00
	"						.....
	"						60,000.00
						7/29/24	30,000.00
						8/28/24	30,000.00
9/ 5/24	"	.....		15,000.00	6%		.....
	"						15,000.00
						11/ 3/24	15,000.00
							.....

*Central Union Tel. Co. Notes amounting to $2,000,000.00 purchased April 1912 and sold back to A. T. & T. Co.

**Central Union Tel. Co. Notes amounting to $7,550,000.00 purchased by Chicago Tel. Co. April 1912 and exchanged for American Tel. & Tel. Co. Notes December 1, 1913.

***Central Union Tel. Co. Notes amounting to $2,450,000.00 purchased by Chicago Tel. Co. as follows,
April 1912 ..... $2,450,000.00

and exchanged for like amount of Chicago Tel. Co. Notes in favor of American Tel. & Tel. Co. November 24, 1913.

****Central Union Tel. Co. Notes amounting to $1,000,000.00 were purchased by Chicago Tel. Co. on October 1, 1913 and exchanged for like amount of Chicago Tel. Co. Notes in favor of American Tel. & Tel. Co.

ILLINOIS BELL TELEPHONE COMPANY

ADVANCES TO WESTERN ELECTRIC COMPANY, INC.
YEARS 1881 TO 1925

Date	Amount	Interest Rate	Payments		Balance at end of Mont
			Date	Amount	
10/28/04	$ 500,000.00	4%		$	$ .....
5/ 1/05	250,000.00	4%			
7/24/05	100,000.00	Not available			
10/ 2/05	250,000.00	5%			1,100,000.0
12/28/05	250,000.00	Not available	12/28/05	250,000.00	
			12/31/08	250,000.00	850,000.0
			4/ 2/06	200,000.00	650,000.0
			8/13/06	400,000.00	250,000.0
			11/30/06	250,000.00	.....

ILLINOIS BELL TELEPHONE COMPANY.

EXHIBIT #44.

Amounts borrowed by Chicago Telephone Company and Illinois Bell Telephone Company from banks. Years 1881 to 1925.

Sheet #1
Exhibit #44

ILLINOIS BELL TELEPHONE COMPANY

LOANS FROM BANKS

YEARS 1881 TO 1925

Date	Name of Bank	Amount	Interest Rate	Payments		Balance at end of Month
				Date	Amount	
11/21/89	Northwestern National Bank.....	$ 50,000.00	"See Note"	"See Note"	$ 50,000.00	"See Note"
9/ 3/90	"	25,000.00			25,000.00	
9/ 9/90	"	25,000.00			25,000.00	
10/ 9/90	"	50,000.00			50,000.00	
11/ 8/90	"	25,000.00			25,000.00	
12/ 6/90	"	25,000,00			25,000.00	
12/ 9/90	"	25,000.00			25,000.00	
12/11/90	"	25,000.00			25,000.00	
12/17/90	"	25,000.00			25,000.00	
12/26/90	"	25,000.00			25,000.00	
1/ 5/91	"	25,000.00			25,000.00	
6/30/91	"	25,000.00			25,000.00	
7/ 6/91	"	25,000.00			25,000.00	
7/28/91	"	25,000.00			25,000.00	
8/ 5/91	"	25,000.00			25,000.00	
8/26/91	Commercial National Bank.....	25,000.00			25,000.00	
9/ 5/91	N. W. National Bank.....	25,000.00			25,000.00	

9/10/91	Commercial National Bank.....	25,000.00	25,000.00
10/ 1/91	N. W. National Bank.....	25,000.00	25,000.00
10/ 1/91	National Bank of America.....	50,000.00	50,000.00
10/ 7/91	N. W. National Bank.....	25,000.00	25,000.00
12/31/91	"	25,000.00	25,000.00
1/12/92	"	25,000.00	25,000.00
1/29/92	"	25,000.00	25,000.00
2/ 4/92	Commercial National Bank.....	50,000.00	50,000.00
2/ 5/92	N. W. National Bank.....	25,000.00	25,000.00
6/10/92	"	25,000.00	25,000.00
6/17/92	"	25,000.00	25,000.00
7/ 5/92	"	25,000.00	25,000.00
7/11/92	"	25,000.00	25,000.00
7/13/92	"	25,000.00	25,000.00
7/20/92	"	25,000.00	25,000.00
7/20/92	Commercial National Bank.....	60,000.00	60,000.00
10/ 5/92	N. W. National Bank.....	25,000.00	25,000.00
10/10/92	"	50,000.00	50,000.00
10/25/92	"	25,000.00	25,000.00
11/ 7/92	Commercial National Bank.....	25,000.00	25,000.00
11/21/92	"	25,000.00	25,000.00
12/ 6/92	"	25,000.00	25,000.00
12/ 7/92	N. W. National Bank.....	25,000.00	25,000.00
12/10/92	Commercial National Bank.....	25,000.00	25,000.00

NOTE—Interest rates and dates of payments not available where not shown.

ILLINOIS BELL TELEPHONE COMPANY

LOANS FROM BANKS

YEARS 1881 TO 1925

Date	Name of Bank	Amount	Interest Rate	Payments		Balance at end of Month
				Date	Amount	
				"See Note"		"See Note"
2/19/93	Northwestern National Bank.....	$ 25,000.00	6%		$ 25,000.00	
2/21/93	"	15,000.00	"		15,000.00	
3/15/93	"	25,000.00	7%		25,000.00	
4/ 3/93	Commercial National Bank.....	50,000.00	6%		50,000.00	
4/11/93	N. W. National Bank.....	20,000.00			20,000.00	
4/17/93	"	25,000.00	7%	6/17/93	25,000.00	
5/ 5/93	Commercial National Bank.....	50,000.00	6%		50,000.00	
6/17/93	"	50,000.00	6%		50,000.00	
6/12/93	N. W. National Bank.....	35,000.00	7%	7/15/93	35,000.00	
6/19/93	"	25,000.00	6%		25,000.00	
11/ 6/95	Commercial National Bank.....	30,000.00	5%		30,000.00	
2/ 4/96	"	100,000.00	6%		100,000.00	
1/23/1900	"	50,000.00	5%	2/31/1900	50,000.00	
2/20/1900	Northwestern National Bank.....	100,000.00	Not available	7/25/1900	100,000.00	
6/20/1900	"	25,000.00			25,000.00	
7/ 2/1900	Commercial National Bank.....	100,000.00	4½%	10/18/1900	100,000.00	
7/ 9/1900	Northern Trust Co.....	100,000.00	3½%	4/ 3/1901	100,000.00	

10/ 1/1900	Northern Trust Co.....	100,000.00	Not available	"	100,000.00	
12/17/1900	"	100,000.00	"	"	100,000.00	
1/ 2/1901	Corn Exchange National Bank.....	200,000.00	4½%	1/29/01	150,000.00	
	"			2/13/01	50,000.00	
7/ 1/01	Northern Trust Co.....	200,000.00	4%	7/20/01	150,000.00	
	"			9/30/01	50,000.00	
11/15/01	"	200,000.00	Not available		100,000.00	
	"			1/17/02	100,000.00	
4/ 2/03	Corn Exchange National Bank.....	200,000.00	"			
	"			5/29/03	100,000.00	
	"			7/ 3/03	100,000.00	.....
10/ 2/06	Corn Exchange National Bank.....	150,000.00	Not available	10/29/06	50,000.00	100,000.00
10/ 2/06	Commercial National Bank.....	200,000.00	"	"	50,000.00	250,000.00
1/ 4/07	"	50,000.00	"			
"	Corn Exchange National Bank.....	50,000.00	"			350,000.00
	Commercial National Bank.....			2/ 2/07	50,000.00	300,000.00
	Corn Exchange National Bank.....			6/ 1/07	150,000.00	
	Commercial National Bank.....			6/ 1/07	150,000.00	.....
7/ 5/1911	First National Bank of Chicago.....	300,000.00	4%			300,000.00
9/30/1911	Northern Trust Co.....	400,000.00	4%			700,000.00
11/ 6/1911	First National Bank of Chicago.....	300,000.00	4½%			1,000,000.00
12/ 4/11	Illinois Trust & Savings Bank.....	300,000.00	4½%			1,300,000.00
1/ 2/12	Corn Exchange National Bank.....	300,000.00	4½%			
1/30/12	Northern Trust Co.....	400,000.00	4%	1/30/12	400,000.00	1,600,000.00

NOTE—Interest rates and dates of payments not available where not shown.

Sheet #3
Exhibit #44

ILLINOIS BELL TELEPHONE COMPANY

LOANS FROM BANKS

YEARS 1881 TO 1925

Date	Name of Bank	Amount	Interest Rate	Payments		Balance at end of Month
				Date	Amount	
	Balance carried Forward.....	$		1/30/1912	$	$1,600,000.00
3/ 6/12	First National Bank of Chicago.....	300,000.00	4%			
3/11/12	"	500,000.00	4%	3/ 6/12	600,000.00	1,800,000.00
4/ 1/12	"	200,000.00	"			
4/ 4/12	Illinois Trust & Savings Bank.....	300,000.00	4½%	4/ 4/12	300,000.00	
	Northern Trust Co.			4/30/12	400,000.00	1,600,000.00
	Corn Exchange National Bank.....			5/ 2/12	300,000.00	1,300,000.00
	First National Bank of Chicago.....			6/ 6/12	300,000.00	
	"			6/11/12	500,000,00	
	Illinois Trust & Savings Bank.....			6/ 3/12	300,000.00	200,000.00
	First National Bank of Chicago.....			8/ 1/12	200,000.00	.....
3/ 1/17	"	500,000.00	4¼%			
"	Illinois Trust & Savings Bank.....	500,000.00	"			
3/14/17	First Trust & Savings Bank.....	500,000.00	4¼%			1,500,000.00
4/ 4/17	Illinois Trust & Savings Bank.....	500,000.00	4¼%			2,000,000.00
5/ 1/17	First Trust & Savings Bank.....	500,000.00	4½%			2,500,000.00
6/ 1/17	First National Bank of Chicago.....	500,000.00	5%			
"	"	500,000.00	"			

"	"	500,000.00	"			
"	Illinois Trust & Savings Bank.....	500,000.00	"			
	First National Bank of Chicago.....			6/11/17	500,000.00	
	Illinois Trust & Savings Bank.....			"	500,000.00	3,500,000.00
	First Trust & Savings Bank.....			7/ 2/17	1,000,000.00	
	First National Bank of Chicago.....			"	1,000,000.00	
	Illinois Trust & Savings Bank.....			7/ 5/17	500,000.00	1,000,000.00
7/ 2/17	First National Bank of Chicago.....	500,000.00	5½%			
"	"	500,000.00	"			
"	First Trust & Savings Bank.....	500,000.00	"			
7/ 5/17	Illinois Trust & Savings Bank.....	500,000.00	"			3,000,000.00
8/ 2/17	"	500,000.00	5½%			3,500,000.00
9/29/17	First National Bank of Chicago.....	500,000.00	5½%			4,000,000.00
10/ 6/17	Illinois Trust & Savings Bank.....	500,000.00	6%			4,500,000.00
	First National Bank of Chicago.....			10/ 1/17	500,000.00	
	Illinois Trust & Savings Bank.....			10/ 2/17	500,000.00	
	"			10/ 3/17	1,000,000.00	
	First Trust & Savings Bank.....			"	500,000.00	
	First National Bank of Chicago.....			"	1,000,000.00	1,000,000.00
	"			12/29/17	500,000.00	500,000.00
12/ 1/17	Illinois Trust & Savings Bank.....	500,000.00	6%			
12/31/17	First National Bank of Chicago.....	500,000.00	"			
"	"	500,000.00	"			2,000,000.00
1/ 7/18	Illinois Trust & Savings Bank.....	500,000.00	"	1/ 6/18	500,000.00	2,000,000.00
2/ 1/18	First National Bank of Chicago.....	500,000.00				2,500,000.00
4/ 1/18	Illinois Trust & Savings Bank.....	600,000.00	"			
	"			4/ 1/18	500,000.00	2,600,000.00
6/29/18	"	400,000.00	"	6/30/18	1,000,000.00	
"	"	500,000.00	"			
"	First National Bank of Chicago.....	500,000.00	"			3,000,000.00

Sheet #4
Exhibit #44

ILLINOIS BELL TELEPHONE COMPANY

LOANS FROM BANKS

YEARS 1881 TO 1925

Date	Name of Bank	Amount	Interest Rate	Payments		Balance at end of Month
				Date	Amount	
	Balance Carried Forward.....	$		6/30/18	$	$3,000,000.00
7/ 1/18	Illinois Trust & Savings Bank.....	600,000.00	6%	7/ 1/18	600,000.00	
"	"	100,000.00	"	7/ 7/18	500,000.00	
"	Corn Exchange National Bank.....	100,000.00	"			
7/ 8/18	Illinois Trust & Savings Bank.....	500,000.00	"			3,200,000.00
8/ 1/18	First National Bank of Chicago.....	500,000.00	"			
8/28/18	Corn Exchange National Bank.....	300,000.00	"	8/ 1/18	500,000.00	3,500,000.00
	"			10/ 1/18	100,000.00	
	First National Bank of Chicago.....			"	500,000.00	
	Illinois Trust & Savings Bank.....			"	2,100,000.00	
	Corn Exchange National Bank.....			10/30/18	300,000.00	500,000.00
	First National Bank of Chicago.....			12/ 1/18	500,000.00	.....
2/ 2/20	"	600,000.00	6%-6½%-7%			600,000.00
3/31/20	Continental & Commercial Nat. Bank	300,000.00	6½%-7%			
3/ 1/20	Illinois Trust & Savings Bank.....	800,000.00	6%			1,700,000.00
4/ 2/20	The Northern Trust Co.....	500,000.00	6½%			2,200,000.00
6/ 1/20	First National Bank of Chicago.....	500,000.00	6½%-7%			
6/10/20	Union Trust Co.....	150,000.00	7%			2,850,000.00

	First National Bank of Chicago.....			10/18/20	1,100,000.00	
	Continental & Commercial Nat. Bank			"	300,000.00	
	Illinois Trust & Savings Bank.....			"	800,000.00	
	Northern Trust Co.....			"	500,000.00	
	Union Trust Co.....			"	150,000.00	.....
12/20/20	The Northern Trust Co.....	500,000.00	7%-6½%-6%			
12/20/20	First National Bank of Chicago.....	500,000.00	7%-6%			
"	Continental & Commercial Nat. Bank	500,000.00	7%-6½%-6%			
"	Illinois Trust & Savings Bank.....	350,000.00	7%-6%			
12/30/20	"	400,000.00	7%			2,250,000.00
1/ 3/21	First National Bank of Chicago.....	500,000.00	7%-6%			2,750,000.00
	"			5/12/21	300,000.00	2,450,000.00
	"			8/25/21	700,000.00	
	The Northern Trust Co.....			"	500,000.00	
	Continental & Commercial Nat. Bank			"	500,000.00	
	Illinois Trust & Savings Bank.....			"	750,000.00	.....

Interest rate increased to 6½%—4/1/20 & 7%—6/5/20
Interest rate increased to 7%—6/1/20
Interest rate increased to 7%—6/8/20
Interest rate increased to 7%—6/5/20
Interest rate reduced to 6½%—8/6/21 to 8/13/21 and 6%—8/13/21 to 8/25/21
Interest rate reduced to 6%—8/1/20
Interest rate reduced to 6½%—8/1/20 and 6%—8/16/20
Interest rate reduced to 6%—8/1/21

CITY'S EXHIBIT 77.

On the date of filing of the original bill herein said American Company was the holder of notes issued in the name of the Union Company of the dates and for the amounts shown on the following list:

Dated	Date Due	Amount
Aug. 1, 1912	May 1, 1913 10 at 1,000,000 ea.	$10,000,000.00
" 1, 1912	Demand 10 at 1,000.000 "	10,000,000.00
" 15, 1912	"	150,000.00
" 17, 1912	"	100,000.00
" 19, 1912	"	400,000.00
" 30, 1912	"	150,000.00
Sept. 17, 1912	"	150,000.00
May 12, 1905	"	300,000.00
July 29, 1905	"	100,000.00
Sept. 27, 1912	"	100,000.00
" 30, 1912	"	150,000.00
Nov. 1, 1912	"	100,000.00
" 18, 1912	"	100,000.00
" 30, 1912	"	200,000.00
Dec. 17, 1912	"	100,000.00
Jan. 24, 1908	"	300,000.00
Jan. 31, 1912	"	20,000.00
Jan. 17, 1913	"	100,000.00
Feb. 27, 1913	"	200,000.00
		$22,720,000.00

Additional notes in the amount of Ten Million, Three Hundred Thousand Dollars ($10,300,000) had been issued in the name of the Union Company to the American Company and by the latter sold and endorsed over to the Chicago Company, and were held by said Chicago Company at the date of filing the original bill herein, but said notes have since been retransferred to the American Company, a list of said notes being as follows:

Dated	Date Due	Amount
July 5, 1905	Demand	$300,000.00
May 27, 1905	"	150,000.00
June 19, 1905	"	300,000.00
Aug. 28, 1905	"	100,000.00
Sept. 12, 1905	"	100,000.00
" 28, 1905	"	100,000.00
Oct. 17, 1905	"	500,000.00
" 31, 1905	"	250,000.00
Nov. 7, 1905	"	200,000.00
Dec. 4, 1905	"	200,000.00
Jan. 3, 1906	"	100,000.00
" 4, 1906	"	200,000.00
" 10, 1906	"	50,000.00
" 27, 1906	"	50,000.00
Mar. 27, 1906	"	250,000.00
May 21, 1906	"	250,000.00
June 7, 1906	"	150,000.00
" 23, 1906	"	100,000.00
" 30, 1906	"	75,000,00
Aug. 8, 1906	"	125,000.00
" 25, 1906	"	125,000.00
Sept. 12, 1906	"	125,000.00
Oct. 15, 1906	"	600,000.00
Nov. 20, 1906	"	250,000.00
Dec. 26, 1906	"	75,000.00
" 31, 1906	"	87,500.00
Jan. 24, 1907	"	350,000.00
Mar. 5, 1907	"	200,000.00
Apr. 9, 1907	"	150,000.00
May 6, 1907	"	150,000.00
June 29, 1907	"	87,500.00
July 13, 1907	"	100,000.00
Aug. 8, 1907	"	100,000.00
Sept. 7, 1907	"	100,000.00
Nov. 22, 1907	"	175,000.00
Dec. 31, 1907	"	87,500.00
Feb. 29, 1908	"	200,000.00
May 25, 1908	"	200,000.00
Aug. 5, 1908	"	100,000.00
Sept. 4, 1908	"	200,000.00
Feb. 3, 1909	"	250,000.00

Date	Date Due	Amount
May 10, 1909	"	100,000.00
" 27, 1909	"	100,000.00
June 9, 1909	"	125,000.00
" 30, 1909	"	87,500,00
Sept. 17, 1909	"	125,000.00
" 27, 1909	"	100,000.00
Oct. 16, 1909	"	125,000.00
Nov. 29, 1909	"	125,000.00
Dec. 27, 1909	"	175,000.00
June 27, 1910	"	200,000.00
Oct. 20, 1910	"	200,000.00
Nov. 15, 1910	"	175,000.00
Dec. 28, 1910	"	75,000.00
Jan. 26, 1911	"	325,000.00
Feb. 20, 1911	"	400,000.00
Mar. 11, 1911	"	200,000.00
Apr. 14, 1911	"	200,000.00
May 13, 1911	"	200,000.00
Total		$10,300,000.00

The records of the Union Company show the following:

CHICAGO, February 20, 1913.

A special meeting of the Board of Directors of the Central Union Telephone Company was held in the Directors' Room, 212 W. Washington street, Chicago, on Thursday, February 20, 1913, at 11 A. M. on call of the President.

President B. E. Sunny presided and the Secretary was in attendance.

The directors present were:

Alonzo Burt,
H. F. Hill,
E. E. Jackson,
L. G. Richardson,
B. E. Sunny,
L. N. Whitney,

constituting a quorum.

The President reported that on the 31st day of July, 1912, the Company was indebted to the American Telephone and

Telegraph Company in the sum of $30,956,696.35 for money theretofore advanced on notes as follows:

* * * * *

that the Company had been informed by the American Telephone and Telegraph Company that it had sold to the Chicago Telephone Company demand notes of the Central Union Telephone Company aggregating the sum of $11,000,000.00 and being certain of the notes hereinbefore set forth; that said notes were all given for money advanced by the American Telephone and Telegraph Company to the Central Union Telephone Company and covered loans previously made; that on the first day of August, 1912, the President and Treasurer did execute and deliver to said American Telephone and Telegraph Company twenty (20) notes payable on demand each for the sum of $1,000,000.00 as evidence of its indebtedness excepting those notes which had been sold by the American Telephone and Telegraph Company to the Chicago Telephone Company; these notes aggregating $20,000,000.00, having been issued in payment of demand notes theretofore given said American Telephone and Telegraph Company for loans made, aggregating $19,956,696.35, the difference of $43,303.65 being advanced in cash by the American Telephone and Telegraph Company; that since said first day of August, 1912, this Company has borrowed from the American Telephone and Telegraph Company the sum of $1,820,000.00 and that the aggregate indebtedness of the Central Union Telephone Company to the American Telephone and Telegraph Company, as evidenced by all of said notes, is now the sum of $32,820,000.00.

On motion of L. G. Richardson, Director, seconded by E. E. Jackson, Director, the report of the President was received and ordered spread upon the minutes, and the action of the President and Treasurer in executing the new notes to the amount of $20,000,000.00 as above set forth in payment of old notes for past indebtedness, was approved, ratified and confirmed, and the total loans made by the Central Union Telephone Company from the American Telephone and Telegraph Company, as evidenced by all the notes above mentioned, aggregating $32,820,000.00, were approved, ratified and confirmed.

CITY'S EXHIBIT 81.

No. 45

ILLINOIS BELL TELEPHONE COMPANY

DIVIDENDS—1881 TO 1925

	Cash	Stock	Total
1881	$	$	$
2	148,000		148,000
3	200,000		200,000
4	310,800		310,800
5	318,780		318,780
6	358,281		358,281
7	427,686		427,686
8	376,065		376,065
9	332,389		332,389
1890	375,990		375,990
1	430,794		430,794
2	485,460		485,460
3	424,350		424,350
4	455,544		455,544
5	455,544		455,544
6	499,224		499,224
7	520,380		520,380
8	520,380		520,380
9	559,550		559,550
1900	749,808	1,000,000	1,749,808
1	960,000		960,000
2	1,075,193		1,075,193
3	1,274,835		1,274,835
4	1,400,000		1,400,000
5	1,400,000		1,400,000
6	1,400,000		1,400,000
7	1,472,713		1,472,713
8	2,012,790	4,500,000	6,512,790
9	2,160,000		2,160,000
1910	2,160,000		2,160,000
1	2,160,000		2,160,000
2	2,160,000		2,160,000
3	2,160,000		2,160,000
4	2,160,000		2,160,000
5	2,160,000		2,160,000
6	2,220,000		2,220,000
7	2,520,000		2,520,000
8	2,960,000		2,960,000
9	3,200,000		3,200,000
1920	3,200,000		3,200,000
1	3,600,000		3,600,000
2	4,000,000		4,000,000
3	4,803,408		4,803,408
4	5,401,752		5,401,752
5	5,600,000		5,600,000

CITY'S EXHIBIT 80.

ILLINOIS BELL TELEPHONE COMPANY

BALANCE SHEETS—YEARS 1901 TO 1912

ASSETS	1901	1902	1903	1904	1905	1906	1907	
Real Estate	$ 1,045,658.77	$ 1,111,644.96	$ 1,273,735.59	$ 1,346,560.20	$ 1,509,895.25	$ 1,764,281.40	$ 2,320,034.53	$ 2,
Equipment	2,316,945.25	3,183,993.96	3,979,737.47	4,166,957.63	4,563,376.90	5,264,589.29	8,540,943.49	9,
Exchange Lines	5,959,637.48	7,402,340.56	8,003,404.62	8,345,877.87	8,978,334.50	10,324,865.37	14,150,645.51	14,
Toll Lines	598,551.90	620,878.22	652,390.70	695,853.67	775,426.77	1,116,971.24	1,459,456.70	1,
Total Plant in Service	9,920,793.40	12,318,857.70	13,909,268.38	14,555,249.37	15,827,033.42	18,470,707.30	26,471,080.23	27,
Construction in Progress	.....	.....	.....	.....	.....	.....	173,066.33	
Total Plant	9,920,793.40	12,318,857.70	13,909,268.38	14,555,249.37	15,827,033.42	18,470,707.30	26,644,146.56	28,
Office Furniture and Fixtures	.....	.....	.....	10,137.29	19,745.56	44,958.70	104,776.34	
Tools and Vehicles	.....	.....	.....	27,799.50	83,885.85	169,056.85	264,283.15	
Supplies	365,973.57	338,338.74	369,057.63	125,701.88	112,762.66	388,132.75	397,738.41	
Total Working Assets	365,973.57	338,338.74	369,057.63	163,638.67	216,394.07	602,148.30	766,797.90	
Cash and Deposits	353,703.80	434,541.52	547,640.00	511,312.69	251,321.36	19,084.94	157,837.03	
Bills Receivable	3,410.06	3,396.93	1,569.31	501,709.09	852,581.59	12,547.21	12,356.20	
Accounts Receivable	288,548.55	547,310.64	616,936.00	680,239.75	423,019.93	508,876.08	657,940.81	
Prepaid Expenses	.....	.....	.....	.....	.....	.....	30,745.79	
Total Current Assets	645,662.41	985,249.09	1,166,145.31	1,693,261.53	1,526,922.88	540,508.23	858,879.83	1,
Stocks and Bonds	15,000.00	14,500.00	125,036.75	114,650.07	104,263.39	93,876.74	92,819.93	
Sinking Funds								
Collections in Abeyance	.....	.....	171,770.28	357,258.44	580,033.11	723,890.84	717,254.83	
Total Assets	$10,947,429.38	$13,656,945.53	$15,741,278.35	$16,884,058.08	$18,254,646.87	$20,431,131.41	$29,079,899.05	$31,
LIABILITIES								
Capital Stock, Common	$ 9,000,000.00	$11,993,400.00	$14,000,000.00	$14,000,000.00	$14,000,000.00	$14,000,000.00	$16,908,500.00	$17
Capital Stock Installments	.....	.....	.....	.....	.....	.....	655,624.28	
Bonded Debt	.....	.....	.....	.....	.....	.....	.....	
Real Estate Mortgage Notes	.....	.....	.....	.....	.....	.....	.....	
Bills Payable	100,000.00	.....	.....	.....	.....	750,000.00	1,685,000.00	
Total Capital Liabilities	9,100,000.00	11,993,400.00	14,000,000.00	14,000,000.00	14,000,000.00	14,750,000.00	19,249,124.28	17
Accounts Payable	1,136,561.97	371,381.91	277,497.06	187,599.63	274,401.58	1,109,314.82	1,226,438.53	
Accrued Liabilities Not Due	103,351.44	427,882.99	113,562.84	225,471.57	245,039.41	330,260.35	268,356.23	
Unearned Revenue	10,979.20	40,119.92	48,956.36	42,796.99	41,084.49	36,846.72	2,064.86	
Total Current Liabilities	1,250,892.61	839,384.82	440,016.26	455,868.19	560,525.48	1,476,421.89	1,496,859.62	
Premium on First Mortgage Bonds	.....	.....	.....	.....	.....	.....	.....	
Replacement Reserves	296,432.87	396,778.04	646,551.32	913,825.83	1,445,155.61	1,868,119.98	2,123,710.50	2
Reserves Invested in Other Special Funds	.....	.....	18,173.29	528,722.31	813,738.38	539,360.03	383,007.13	
Surplus	300,103.90	427,382.67	464,767.20	628,383.28	855,194.29	1,073,338.67	5,109,942.69	
Employees Benefit Fund								
Reserve for Earnings in Abeyance	.....	.....	171,770.28	357,258.44	580,033.11	723,890.84	717,254.83	
Total Liabilities	$10,947,429.38	$13,656,945.53	$15,741,278.35	$16,884,058.08	$18,254,646.87	$20,431,131.41	$29,079,899.05	$3

CITY'S EXHIBIT 80.

NO. 46
SHEET 1.

ILLINOIS BELL TELEPHONE COMPANY

BALANCE SHEETS—YEARS 1901 TO 1912

1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912
$ 1,045,658.77	$ 1,111,644.96	$ 1,273,735.59	$ 1,346,560.20	$ 1,509,895.25	$ 1,764,281.40	$ 2,320,034.53	$ 2,551,487.92	$ 2,749,985.66	$ 2,868,606.51	$ 3,204,445.31	$ 4,782,644.90
2,316,945.25	3,183,993.96	3,979,737.47	4,166,957.63	4,563,376.90	5,264,589.29	8,540,943.49	9,163,563.47	10,164,677.29	11,465,984.26	13,136,510.23	14,316,899.71
5,959,637.48	7,402,340.56	8,003,404.62	8,345,877.87	8,978,334.50	10,324,865.37	14,150,645.51	14,583,621.22	14,795,572.15	15,802,983.54	18,114,205.70	19,572,415.93
598,551.90	620,878.22	652,390.70	695,853.67	775,426.77	1,116,971.24	1,459,456.70	1,459,456.70	1,896,296.35	1,960,274.33	1,999,940.89	2,066,805.99
9,920,793.40	12,318,857.70	13,909,268.38	14,555,249.37	15,827,033.42	18,470,707.30	26,471,080.23	27,758,129.31	29,606,531.45	32,097,848.64	36,455,102.13	40,738,766.53
.....	.....	.....	.....	.....	.....	173,066.33	909,225.82	1,053,058.65	1,261,689.21	1,258,076.27	685,942.71
9,920,793.40	12,318,857.70	13,909,268.38	14,555,249.37	15,827,033.42	18,470,707.30	26,644,146.56	28,667,355.13	30,659,590.10	33,359,537.85	37,713,178.40	41,424,709.24
.....	.....	.....	10,137.29	19,745.56	44,958.70	104,776.34	145,692.99	97,895.87	126,869.53	178,635.70	277,461.35
.....	.....	.....	27,799.50	83,885.85	169,056.85	264,283.15	291,167.80	261,530.67	284,467.69	304,100.40	333,645.51
365,973.57	338,338.74	369,057.63	125,701.88	112,762.66	388,132.75	397,738.41	424,813.56	510,471.32	703,414.63	831,629.65	986,756.98
365,973.57	338,338.74	369,057.63	163,638.67	216,394.07	602,148.30	766,797.90	861,674.35	869,897.86	1,114,751.85	1,314,365.75	1,597,863.84
353,703.80	434,541.52	547,640.00	511,312.69	251,321.36	19,084.94	157,837.03	455,364.17	3,758,692.10	1,820,503.51	874,947.62	933,663.19
3,410.06	3,396.93	1,569.31	501,709.09	852,581.59	12,547.21	12,356.20	12,429.62	828.79	289,757.84	636.14	10,346,224.25
288,548.55	547,310.64	616,936.00	680,239.75	423,019.93	508,876.08	657,940.81	562,379.68	654,934.30	592,405.40	737,087.34	783,664.73
.....	.....	.....	.....	.....	.....	30,745.79	2,865.36	59,284.85	68,830.95	127,509.90	101,003.06
645,662.41	985,249.09	1,166,145.31	1,693,261.53	1,526,922.88	540,508.23	858,879.83	1,033,038.83	4,473,740.04	2,771,497.70	1,740,181.00	12,164,555.23
				104,263.39	93,876.74	92,819.93	82,933.27				
15,000.00	14,500.00	125,036.75	114,650.07					72,588.00	642,966.24	10,393.90	11,252.50
											2,000.00
.....	.....	171,770.28	357,258.44	580,033.11	723,890.84	717,254.83	717,254.83	.....	.....	.....	.....
$10,947,429.38	$13,656,945.53	$15,741,278.35	$16,884,058.08	$18,254,646.87	$20,431,131.41	$29,079,899.05	$31,362,256.41	$36,075,816.00	$37,888,753.64	$40,778,119.05	$55,200,380.81
$ 9,000,000.00	$11,993,400.00	$14,000,000.00	$14,000,000.00	$14,000,000.00	$14,000,000.00	$16,908,500.00	$27,000,000.00	$27,000,000.00	$27,000,000.00	$27,000,000.00	$27,000,000.00
.....	.....	.....	.....	.....	.....	655,624.28	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	5,000,000.00	5,000,000.00	5,000,000.00	19,014,000.00
.....	.....	.....	.....	.....	.....	.....	.....	4,000.00	4,000.00	4,000.00	4,000.00
100,000.00	.....	.....	.....	.....	750,000.00	1,685,000.00	.....	.....	.....	1,000,000.00	.....
9,100,000.00	11,993,400.00	14,000,000.00	14,000,000.00	14,000,000.00	14,750,000.00	19,249,124.28	27,000,000.00	32,004,000.00	32,004,000.00	33,004,000.00	46,018,000.00
1,136,561.97	371,381.91	277,497.06	187,599.63	274,401.58	1,109,314.82	1,226,438.53	231,165.93	458,317.47	946,872.61	1,260,968.83	986,753.47
103,351.44	427,882.99	113,562.84	225,471.57	245,039.41	330,260.35	268,356.23	226,247.37	507,825.32	585,795.18	671,430.09	781,230.78
10,979.20	40,119.92	48,956.36	42,796.99	41,084.49	36,846.72	2,064.86	1,973.06	1,548.96	1,950.91	.....	.....
1,250,892.61	839,384.82	440,016.26	455,868.19	560,525.48	1,476,421.89	1,496,859.62	459,386.36	967,691.75	1,534,618.70	1,932,398.92	1,767,984.25
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	65,500.00
296,432.87	396,778.04	646,551.32	913,825.83	1,445,155.61	1,868,119.98	2,123,710.50	2,213,892.61	2,212,506.49	4,113,644.08	5,497,787.10	6,614,689.01
.....	.....	18,173.29	528,722.31	813,738.38	539,360.03	383,007.13	287,044.58	146,232.17	141,417.93	146,319.79	139,149.31
300,103.90	427,382.67	464,767.20	628,383.28	855,194.29	1,073,338.67	5,109,942.69	684,678.03	745,385.59	95,072.93	197,613.24	195,058.24
											400,000.00
.....	.....	171,770.28	357,258.44	580,033.11	723,890.84	717,254.83	717,254.83	.....	.....	.....	.....
$10,947,429.38	$13,656,945.53	$15,741,278.35	$16,884,058.08	$18,254,646.87	$20,431,131.41	$29,079,899.05	$31,362,256.41	$36,075,816.00	$37,888,753.64	$40,778,119.05	$55,200,380.81

ILLINOIS BELL TELEPHONE COMPANY

BALANCE SHEETS—YEARS 1913 TO 1925

ASSETS	1913	1914	1915	1916	1917	1918	1919	1920	192
Intangible Capital	$	$ 1,280.12	$ 1,227.89	$ 3,508.56	$ 3,727.89	$ 3,727.89	$ 8,085.11	$ 7,719.72	$ 54,
Right of Way	90,797.48	112,628.75	207,440.95	242,527.12	271,490.72	287,252.78	303,620.45	461,804.07	480,
Land and Buildings	5,196,366.48	5,872,356.27	6,876,893.84	7,505,306.32	8,547,020.58	10,519,018.04	10,678,892.65	11,844,347.34	12,095,
Central Office Equipment	7,584,278.35	9,769,083.74	10,970,452.68	12,017,929.42	13,3[illegible]5,213.05	14,636,917.66	15,697,770.53	19,495,234.95	21,887,
Station Equipment	8,708,543.26	9,610,189.06	9,594,112.33	10,765,122.18	11,858,024.19	12,696,608.09	14,409,783.71	17,667,150.20	19,792,
Exchange Lines	22,508,825.80	25,014,411.22	27,001,671.92	29,524,480.92	32,963,541.26	34,224,456.79	35,922,023.59	44,091,821.46	46,051,
Toll Lines	2,129,300.93	2,544,261.46	2,958,397.83	3,587,221.41	5,037,721.68	5,362,139.55	5,494,526.18	11,431,878.53	11,771,
Other Plant	.....	10.00*	150.90*	1,049.75	1,049.75	1,049.75	236,049.75	279,765.16	169,
General Equipment	782,877.61	814,464.23	856,255.55	927,580.54	1,135,793.42	1,133,410.23	1,242,912.53	1,696,991.89	1,907,
Total Fixed Capital	47,000,989.91	53,738,664.85	58,466,302.09	64,574,726.22	73,163,582.54	78,864,580.78	83,993,664.50	106,976,713.32	114,210,
Construction Work in Progress	1,296,911.94	1,855,707.92	820,101.36	1,443,926.30	2,072,260.03	303,182.75	283,574.55	1,129,321.95	5,635,
Investment Securities	9,952.50	8,952.50	7,952.50	.....	.....	.....	.....	.....	110,
Advances to System Corp. for Constr.	7,390,100.00	40,100.00	40,100.00	40,100.00	40,100.00	40,100.00	40,100.00	40,100.00	40,
Miscellaneous Investments	15,044.95	49,758.61	155,317.68	142,241.61	103,108.40	134,149.00	90,360.90	48,160.66	50,
Total Permanent and Long Term Invest.	55,712,999.30	55,693,183.88	59,489,773.63	66,200,994.13	75,379,050.97	79,342,012.53	84,407,699.95	108,194,295.93	120,047,
Cash and Deposits	393,696.73	616,707.51	875,040.28	512,297.85	603,047.77	692,570.81	640,085.82	595,285.12	908
Marketable Securities	1,405.09	1,400.00	2,074.53	2,988.67	504,788.80	571,905.23	530.39	381.81	1
Bills Receivable	14,962.04	2,000,060.75	501,263.48	501,457.69	1,546.64	1,663.11	109.64	505.86	16
Accounts Receivable	881,532.03	1,007,220.53	836,448.46	890,698.05	1,153,602.11	1,423,750.40	3,655,159.57	4,138,477.94	4,953
Materials and Supplies	574,008.95	328,034.15	316,279.10	415,127.94	772,361.71	760,384.05	838,237.13	1,060,410.68	762
Total Working Assets	1,865,604.84	3,953,422.94	2,531,105.85	2,322,570.20	3,035,347.03	3,450,273.60	5,134,122.55	5,795,061.41	6,642
Accrued Income Not Due	1,062.98	658.69	996.39	1,531.75	4,469.57	6,602.82	853.30	1,777.65	4
Sinking Fund Assets	3,000.00	.....	.....	.....	.....	.....	.....	.....	..
Prepayments	184,517.09	137,657.17	171,190.27	126,195.28	141,717.37	150,487.00	195,394.19	359,202.93	410
Unamortized Debt Discount and Expense	.....	.....	.....	.....	.....	.....	.....	.....	..
Other Deferred Debits	14,381.22	20,854.16	77,440.26	24,681.64	28,778.63	651,208.15	187,132.16	61,372.51	35
Total Deferred Debit Items	201,898.31	158,511.33	248,630.53	150,876.92	170,496.00	801,695.15	382,526.35	420,575.44	445
Total Assets	$57,781,565.43	$59,805,776.84	$62,270,506.40	$68,675,973.00	$78,589,363.57	$83,600,584.10	$89,925,202.15	$114,411,710.43	$127,139
LIABILITIES									
Capital Stock, Common	$27,000,000.00	$27,000,000.00	$27,000,000.00	$30,000,000.00	$36,000,000.00	$40,000,000.00	$40,000,000.00	$40,000,000.00	$50,000
Capital Stock Installments	.....	.....	.....						
Total Capital Stock	27,000,000.00	27,000,000.00	27,000,000.00	30,000,000.00	36,000,000.00	40,000,000.00	40,000,000.00	40,000,000.00	50,000
Premiums on Capital Stock	.....	.....	.....	2,486.25	2,911.25	2,911.25	2,911.25	2,911.25	2
Funded Debt	19,021,500.00	19,049,950.00	19,233,417.00	19,176,417.00	19,092,500.00	19,046,500.00	19,039,000.00	35,087,179.39	35,087
Advances from System Corp. to Constr.	.....	.....	.....	.....	.....	.....	1,272,230.95	4,000,000.00	..
Total Long Term Debt	19,021,500.00	19,049,950.00	19,233,417.00	19,176,417.00	19,092,500.00	19,046,500.00	20,311,230.95	39,087,179.39	35,087
Bills Payable	.....	5,500.00	8,500.00	5,500.00	2,605,500.00	.....	.....	2,250,000.00	..
Accounts Payable	1,919,254.42	1,901,529.88	1,802,988.37	1,916,930.26	1,806,399.77	1,474,136.77	2,610,266.92	3,355,741.39	4,86(
Total Working Liabilities	1,919,254.42	1,907,029.88	1,811,488.37	1,922,430.26	3,811,899.77	1,474,136.77	2,610,266.92	5,605,741.39	4,86(
Accrued Liabilities Not Due	871,900.96	971,383.91	1,080,513.21	1,710,647.79	1,664,442.03	2,643,713.03	2,097,032.65	2,599,933.71	4,04
Unextinguished Premium on Debt	59,470.50	53,474.19	47,457.39	41,463.03	35,486.32	29,516.99	23,513.63	1,911.22	1
Insurance and Casualty Reserves	344,827.88	359,230.36	373,188.80	381,572.21	383,398.79	391,548.02	394,611.53	382,516.99	40
Liability for Empl. Benefit Fund	400,000.00	400,000.00	500,000.00	500,000.00	500,000.00	479,992.67	500,000.00	500,000.00	52
Liability on Acc't. of other Provident Funds	3,811.35	277.90	.....	.....	.....	.....	.....	.....	
Other Deferred Credit Items									

ILLINOIS BELL TELEPHONE COMPANY

BALANCE SHEETS—YEARS 1913 TO 1925

1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925
$ 1,280.12	$ 1,227.89	$ 3,508.56	$ 3,727.89	$ 3,727.89	$ 8,085.11	$ 7,719.72	$ 54,469.93	$ 42,638.85	$ 42,638.85	$ 3,977.89	$ 3,977.89
112,628.75	207,440.95	242,527.12	271,490.72	287,252.78	303,620.45	461,804.07	480,615.26	498,946.87	593,751.32	631,018.89	694,557.04
5,872,356.27	6,876,893.84	7,505,306.32	8,547,020.58	10,519,018.04	10,678,892.65	11,844,347.34	12,095,623.94	12,408,049.38	13,146,159.76	14,375,796.06	15,746,074.39
9,769,083.74	10,970,452.68	12,017,929.42	13,345,213.05	14,636,917.66	15,697,770.53	19,495,234.95	21,887,826.52	26,148,668.25	35,587,995.13	38,956,103.38	46,448,517.59
9,610,189.06	9,594,112.33	10,765,122.18	11,858,024.19	12,696,608.09	14,409,783.71	17,667,150.20	19,792,415.29	22,254,815.40	25,184,464.84	28,501,044.79	31,802,917.44
25,014,411.22	27,001,671.92	29,524,480.92	32,963,541.26	34,224,456.79	35,922,023.59	44,091,821.46	46,051,500.56	49,124,610.13	53,806,646.09	59,593,246.87	67,418,408.93
2,544,261.46	2,958,397.83	3,587,221.41	5,037,721.68	5,362,139.55	5,494,526.18	11,431,878.53	11,771,955.12	12,624,363.34	13,238,157.96	13,557,907.05	14,939,512.70
10.00*	150.90*	1,049.75	1,049.75	1,049.75	236,049.75	279,765.16	169,134.66	566,598.14	762,150.12	878,103.11	1,138,924.26
814,464.23	856,255.55	927,580.54	1,135,793.42	1,133,410.23	1,242,912.53	1,696,991.89	1,907,303.75	2,222,749.26	2,481,993.88	2,734,527.56	3,049,168.84
53,738,664.85	58,466,302.09	64,574,726.22	73,163,582.54	78,864,580.78	83,993,664.50	106,976,713.32	114,210,845.03	125,891,439.62	144,843,957.95	159,231,725.60	181,242,059.08
1,855,707.92	820,101.36	1,443,926.30	2,072,260.03	303,182.75	283,574.55	1,129,321.95	5,635,149.66	6,928,323.93	1,182,765.17	3,025,847.45	1,856,437.91
8,952.50	7,952.50	.....	.....	.....	.....	.....	110,300.00	249,800.00	318,900.00	832,900.00	931,600.00
40,100.00	40,100.00	40,100.00	40,100.00	40,100.00	40,100.00	40,100.00	40,100.00	39,100.00	.....	.....	.....
49,758.61	155,317.68	142,241.61	103,108.40	134,149.00	90,360.90	48,160.66	50,870.43	50,870.43	79,248.51	103,192.92	47,702.90
55,693,183.88	59,489,773.63	66,200,994.13	75,379,050.97	79,342,012.53	84,407,699.95	108,194,295.93	120,047,265.12	133,159,533.98	146,424,871.63	163,193,665.97	184,077,799.89
616,707.51	875,040.28	512,297.85	603,047.77	692,570.81	640,085.82	595,285.12	908,565.65	1,509,975.00	1,987,693.43	1,257,694.07	1,677,589.19
1,400.00	2,074.53	2,988.67	504,788.80	571,905.23	530.39	381.81	1,334.03	4,356.94	11,004,229.41	13,362.18	35,904.47
2,000,060.75	501,263.48	501,457.69	1,546.64	1,663.11	109.64	505.86	16,393.59	32,312.79	52,847.88	4,127.01	27,826.90
1,007,220.53	836,448.46	890,698.05	1,153,602.11	1,423,750.40	3,655,159.57	4,138,477.94	4,953,834.18	5,157,659.44	5,603,389.62	8,223,106.39	5,815,050.33
328,034.15	316,279.10	415,127.94	772,361.71	760,384.05	838,237.13	1,060,410.68	762,368.98	793,603.42	933,320.24	833,704.03	943,021.52
3,953,422.94	2,531,105.85	2,322,570.20	3,035,347.03	3,450,273.60	5,134,122.55	5,795,061.41	6,642,496.43	7,497,907.59	19,581,480.58	10,331,993.71	8,499,392.41
658.69	996.39	1,531.75	4,469.57	6,602.82	853.30	1,777.65	4,217.51	4,681.66	146,182.50	8,132.89	10,277.25
.....	.....	.....	.....	.....	.....	.....	.....	.....	77,512.03	85,212.55	250,688.19
137,657.17	171,190.27	126,195.28	141,717.37	150,487.00	195,394.19	359,202.93	410,127.68	371,470.46	524,723.59	572,371.85	605,233.47
.....	.....	.....	.....	.....	.....	.....	.....	.....	4,080,556.61	3,918,270.18	3,766,920.16
20,854.16	77,440.26	24,681.64	28,778.63	651,208.15	187,132.16	61,372.51	35,867.49	86,790.39	142,237.92	339,060.40	261,957.45
158,511.33	248,630.53	150,876.92	170,496.00	801,695.15	382,526.35	420,575.44	445,995.17	458,260.85	4,825,030.15	4,914,914.98	4,884,799.27
$59,805,776.84	$62,270,506.40	$68,675,973.00	$78,589,363.57	$83,600,584.10	$89,925,202.15	$114,411,710.43	$127,139,974.23	$141,120,384.08	$170,977,564.86	$178,448,707.55	$197,472,268.82
$27,000,000.00	$27,000,000.00	$30,000,000.00	$36,000,000.00	$40,000,000.00	$40,000,000.00	$40,000,000.00	$50,000,000.00	$60,000,000.00	$60,087,500.00	$70,000,000.00	$80,000,000.00
.....	.....								7,930,020.00		
27,000,000.00	27,000,000.00	30,000,000.00	36,000,000.00	40,000,000.00	40,000,000.00	40,000,000.00	50,000,000.00	60,000,000.00	68,017,520.00	70,000,000.00	80,000,000.00
.....	.....	2,486.25	2,911.25	2,911.25	2,911.25	2,911.25	2,911.25	2,911.25	2,911.25	2,911.25	3,433.25
19,049,950.00	19,233,417.00	19,176,417.00	19,092,500.00	19,046,500.00	19,039,000.00	35,087,179.39	35,087,179.39	34,884,179.39	49,992,700.00	49,590,200.00	49,252,900.00
.....	.....	.....	.....	.....	1,272,230.95	4,000,000.00	.....	.....	.....	.....	3,000,000.00
19,049,950.00	19,233,417.00	19,176,417.00	19,092,500.00	19,046,500.00	20,311,230.95	39,087,179.39	35,087,179.39	34,884,179.39	49,992,700.00	49,590,200.00	52,252,900.00
5,500.00	8,500.00	5,500.00	2,005,500.00	.....	.....	2,250,000.00	.....	.....	.....	.....	.....
1,901,529.88	1,802,988.37	1,916,930.26	1,806,399.77	1,474,136.77	2,610,266.92	3,355,741.39	4,860,970.42	2,754,294.91	3,655,063.60	4,242,307.47	3,609,511.19
1,907,029.88	1,811,488.37	1,922,430.26	3,811,899.77	1,474,136.77	2,610,266.92	5,605,741.39	4,860,970.42	2,754,294.91	3,655,063.60	4,242,307.47	3,609,511.19
971,383.91	1,080,513.21	1,710,647.79	1,664,442.03	2,643,713.03	2,097,032.65	2,599,933.71	4,044,936.86	4,114,610.48	4,670,118.29	4,833,478.20	5,555,081.35
53,474.19	47,457.39	41,463.03	35,486.32	29,516.99	23,513.63	1,911.22	1,256.02	600.82	.....	.....	.....
359,230.36	373,158.80	381,572.21	383,398.79	391,548.02	394,611.53	382,516.99	407,272.76	433,470.52	.....	.....	.....
400,000.00	500,000.00	500,000.00	500,000.00	479,992.67	500,000.00	500,000.00	523,574.62	1,400,000.00	1,400,000.00	2,000,000.00	2,900,000.00

Unextinguished Premium on Debt.....	55,470.50	53,474.19	47,457.39	41,463.03	35,486.32	29,516.99	23,513.63	1,911.22	1,2
Insurance and Casualty Reserves.....	344,827.88	359,230.36	373,188.80	381,572.21	383,398.79	391,548.02	394,611.53	382,516.99	407,2
Liability for Empl. Benefit Fund.....	400,000.00	400,000.00	500,000.00	500,000.00	500,000.00	479,992.67	500,000.00	500,000.00	523,5
Liability on Acc't. of other Provident Funds.	3,811.35	277.90	.....	.....	.....	.....	.....	.....	...
Other Deferred Credit Items.....			1,237.69	1,460.17	18,358.78	6,695.94	204.10	69,040.82	63,(
Total Deferred Credit Items.....	808,109.73	812,982.45	921,883.88	924,495.41	937,243.89	907,753.62	918,329.26	953,469.03	995,1
Reserve for Accrued Depreciation.....	7,363,013.96	8,885,516.74	10,262,980.89	12,303,433.78	14,866,735.65	18,126,064.27	21,652,004.44	25,435,825.88	29,39
Reserve for Amort. of Intangible Capital....	.....	.....	185.98	36,669.84	51,980.22	64,649.05	76,468.73	94,827.23	11
Total Fixed Capital Reserves.....	7,363,013.96	8,885,516.74	10,263,166.87	12,340,103.62	14,918,715.87	18,190,713.32	21,728,473.17	25,530,653.11	29,51
Undivided Profits		406,221.47	797,047.99	1,193,585.62	73,001.78*	793,200.94*	1,149,982.06	1,426,460.87	2,02
Appropriated Surplus	135,022.82	2,000.00	103,000.00	104,000.00	105,000.00	106,000.00	107,000.00	1,842.40	...
Corporate Surplus Unappropriated.....	662,763.54	770,692.39	1,059,989.08	1,301,807.05	2,129,652.54	2,022,057.05	999,975.89	796,480.72*	610,
Total Surplus and Undivided Profits....	797,786.36	1,178,913.86	1,960,037.07	2,599,392.67	2,161,650.76	1,334,856.11	2,256,957.95	631,822.55	2,63
Total Liabilities	$57,781,565.43	$59,805,776.84	$62,270,506.40	$68,675,973.00	$78,589,363.57	$83,600,584.10	$89,925,202.15	$114,411,710.43	$127,13

*Red.

53,474.19	47,457.39	41,463.03	35,486.32	29,516.99	23,513.63	1,911.22	1,256.02	600.82	.....	.....	.....
359,230.36	373,188.80	381,572.21	383,398.79	391,548.02	394,611.53	382,516.99	407,272.76	433,470.52	.....	.....	.....
400,000.00	500,000.00	500,000.00	500,000.00	479,992.67	500,000.00	500,000.00	523,574.62	1,400,000.00	1,400,000.00	2,000,000.00	2,900,000.00
277.90	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	1,237.69	1,460.17	18,358.78	6,695.94	204.10	69,040.82	63,074.66	45,750.51	63,919.93	58,397.31	32,422.21
812,982.45	921,883.88	924,495.41	937,243.89	907,753.62	918,329.26	953,469.03	995,178.06	1,879,821.85	1,463,919.93	2,058,397.31	2,932,422.21
8,885,516.74	10,262,980.89	12,303,433.78	14,866,735.65	18,126,064.27	21,652,004.44	25,435,825.88	29,399,991.53	33,390,331.47	37,392,963.40	40,734,255.95	44,366,947.64
.....	185.98	36,669.84	51,980.22	64,649.05	76,468.73	94,827.23	112,758.96	132,568.27	182,041.50	177,186.30	196,050.10
8,885,516.74	10,263,166.87	12,340,103.62	14,918,715.87	18,190,713.32	21,728,473.17	25,530,653.11	29,512,750.49	33,522,899.74	37,575,004.90	40,911,442.25	44,562,997.74
406,221.47	797,047.99	1,193,585.62	73.001.78*	793,200.94*	1,149,982.06	1,426,160.87	2,025,951.60	2,353,628.60	1,048,820.78	47,357.45	1,736,425.90
2,000.00	103,000.00	104,000.00	105,000.00	106,000.00	107,000.00	1,842.40	.....	.....	460,297.59	2,215,874.27	4,149,536.94
770,692.39	1,059,989.08	1,301,807.05	2,129,652.54	2,022,057.05	999,975.89	796,480.72*	610,096.16	1,608,037.86	4,091,208.52	4,546,739.35	2,669,960.24
1,178,913.86	1,960,037.07	2,599,392.67	2,161,650.76	1,334,856.11	2,256,957.95	631,822.55	2,636,047.76	3,961,666.46	5,600,326.89	6,809,971.07	8,555,923.08
$59,805,776.84	$62,270,506.40	$68,675,973.00	$78,589,363.57	$83,600,584.10	$89,925,202.15	$114,411,710.43	$127,139,974.23	$141,120,384.08	$170,977,564.86	$178,448,707.55	$197,472,268.82

CITY'S EXHIBIT 82.

No. 47

ILLINIOIS BELL TELEPHONE COMPANY

ENTIRE COMPANY

NET EARNINGS AVAILABLE FOR INTEREST AND DIVIDENDS

Year 1882	177,153.17
1883	214,447.41
1884	261,660.99
1885	321,571.75
1886	372,843.30
1887	433,675.81
1888	382,665.41
1889	407,719.49
1890	451,306.30
1891	473,022.28
1892	489,667.40
1893	540,199.02
1894	510,675.49
1895	546,406.45
1896	602,647.85
1897	624,693.47
1898	633,952.28
1899	676,559.98
1900	880,848.90
1901	1,094,064.71
1902	1,221,689.42
1903	1,431,685.71
1904	1,563,623.17
1905	1,626,811.01
1906	1,632,720.42
1907	1,926,851.58
1908	2,164,524.45
1909	2,373,460.36
1910	2,509,283.94
1911	2,527,061.81
1912	3,295,708.61
1913	3,605,968.16
1914	3,523,671.10
1915	4,122,568.60
1916	4,395,750.29
1917	3,541,569.19
1918	3,248,879.13
1919	3,223,282.33
1920	2,697,843.88
1921	7,668,279.06
1922	8,425,664.43
1923	9,101,929.06
1924	10,012,223.97
1925	11,175,265.39

CITY EXHIBIT 85.

ILLINOIS BELL TELEPHONE COMPANY

I hereby certify that the following is a true copy of resolution duly adopted by the Board of Directors of the Illinois Bell Telephone Company at a regular meeting duly called and held on January 26, 1916, at which meeting a quorum was present.

.....
Secretary.

The President explained that the Construction program for 1916 contemplates an expenditure of $6,546,000 for additions to property, a considerable portion of which will be charged to the Depreciation Reserve, some of which will be charged to expenses, and a smaller part of which will be paid from surplus earnings. The cash requirements in new capital will be approximately $3,800,000.

The amount loaned to the American Telephone and Telegraph Company from the proceeds of the sale of bonds has been paid back, with the exception of $500,000, which will be paid shortly when we require it.

It will, therefore, be necessary to provide additional funds to care for the above expenditures.

Upon motion duly supported, the following resolution was unanimously adopted:

RESOLVED: That in order to provide additional and necessary funds for the acquisition of property and the construction, extension, improvement of and addition to this Company's facilities in accordance with the construction program for 1916, outlined by the President, the Treasurer be and he is hereby instructed to offer for subscription at par, Thirty Thousand (30,000) shares of the authorized but unissued capital stock of the Chicago Telephone Company to stockholders of record on the Company's books at the close of business on March 1, 1916, pro rata to their respective holdings. Subscriptions must reach the office of the Treasurer not later than March 15, 1916. No fractional shares shall be subscribed for or issued, but the Treasurer is authorized to recognize assignments of fractional rights combined to make whole shares. Fractions of shares arising from the pro rata offerings hereby authorized, which have not been combined in whole shares by the closing of subscriptions, shall be sold under the direction of the Board of Directors or Executive Committee, in whole

shares for the best obtainable price, and the premium realized shall be divided among the stockholders entitled to such fractions pro rata to their respective fractions.

Subscriptions for stock shall be payable in installments as follows:

50% on April 1, 1916.
50% on July 1, 1916.

Interest at the rate of 6% per annum on the first installment will be paid on the first day of July, and on receipt of the second and final payment on July 1st, certificates will issue.

The rights of the Stockholder or assignee to subscribe for or to purchase and receive the shares of stock offered, shall be considered waived and shall be lost, in case the subscription and payments are not received at the Treasurer's office on or before the dates specified therefor. Any shares unsubscribed for or not paid for may be sold under the direction of the Directors or the Executive Committee, and the proceeds paid into the Treasurey of the Company.

CITY'S EXHIBIT 92.

Extract from order of Public Utilities Commission of Illinois entered April 17, 1918, in the matter of the application of the City of Peoria to compel the Central Union Telephone Company, a corporation, to reduce its rates to its subscribers in the City of Peoria, and the application of the Receivers, Central Union Telephone Company for authority to establish a new schedule of rates in the City of Peoria, resulting in certain increases and changes in existing rates, Case No. 3043.

The Central Union Telephone Company maintains a telephone plant in the city of Peoria, Illinois, and conducts a general telephone business there—maintaining a main exchange in the busines section of the city hereinafter referred to as the Fulton Street exchange, and a branch exchange hereinafter referred to as the Bluffs exchange. The Central Union Telephone Company is one of the subsidiary companies of the American Telephone and Telegraph Company, the latter company owning approximately 98 per cent of the entire capital stock of the Central Union Telephone Company. At the time this proceeding was instituted an action was pending in the Superior Court of Cook County in the State of Illinois, in a case entitled William A. Read et al. *vs.* Central Union Telephone Company et al. which was an

action instituted by the minority stockholders against the American Telephone and Telegraph Company and the Central Union Telephone Company, and certain other defendants, attacking the legality of the stock ownership of the Central Union Telephone Company by the American Telephone and Telegraph Company and praying for an accounting of all money received by the parent company and for other relief in matters not pertinent to this case. As a result of such proceeding the Superior Court of Cook County, Judge William E. Dever presiding, appointed three receivers for the Central Union Telephone Company, and this case proceeded on the answers and cross-petitions of the receivers of said Company.

On November 6, 1914, the city of Peoria filed with this Commission its complaint against the Central Union Telephone Company and its receivers alleging that the rate schedule maintained by the Central Union Telephone Company and its receivers hereinafter referred to as respondent, was unjust and unreasonable and in excess of said company's regular schedule of rates for other cities of like size and population for the same class of services under like conditions. The city further alleged that the city of Peoria passed an ordinance fixing the rates of the respondent and that the Telephone Company ignored the provisions of said ordinance and continued in effect its present schedule.

The initial hearing in this matter was held before the Commission, at Springfield, January 19, 1915, and subsequent hearings were held from time to time at Springfield and Chicago during 1915, 1916 and 1917. The record contains 6,183 pages. Forty-eight witnesses were examined and two hundred and forty-three exhibits were filed.

Included in the operating expenses is a charge of 4½ per cent of the gross earnings of the Central Union Company, which is paid to the American Telephone and Telegraph Company. The city of Peoria attacked the propriety of this payment. However, at the time this proceeding was instituted, the propriety of this payment was also in dispute in the suit pending in the Superior Court of Cook County, in which suit the receivers of the Central Union Company were appointed.

Counsel for the Central Union Company came into this proceeding to justify the 4½ per cent payment and counsel for the minority stockholders, who had instituted the suit in the Superior Court of Cook County, also came into this proceeding and co-operated with the corporation counsel of the city

of Peoria in attacking this item of the income account. Pending the final outcome of the litigation in the Superior Court of Cook County, the making of the paymets to the American Telephone and Telegraph Company is being held in abeyance and in the meantime the amount required for them is being charged in the operating accounts.

The evidence introduced in connection with the 4½ per cent feature and the issues relating thereto occupied a very large part of the time of the Commission in the hearing of this case. A great deal of the testimony relates to the license contract between the Central Union Company and the American Telephone and Telegraph Company and its predecessor, the American Bell Telephone Company.

The Central Union Company is one of the Associated Companies of the Bell System, to which companies the American Telephone and Telegraph Company furnishes instruments under the license contract relations. In the Central Union Company, as in most of the Associated Bell Companies, the American Company owns a majority of the stock. The validity of this stock ownership is also in litigation in the suit instituted in the Superior Court of Cook County by the minority stockholders.

The American Company furnishes the Central Union Company with receivers, transmitters and induction coils for the telephone sets used throughout its plant, including not only the instruments at the subscriber's stations, but also those used at the switchboard or in any other way. A sufficient number of instruments is furnished to equip the stations actually in service, with a reserve of 3 per cent in the Central Union Company's possession, and the American Company maintains a reserve of approximately 6 per cent. The American Company repairs any instruments worn out or destroyed and replaces obsolete types with new types, at any time, on demand of the Central Union Company. The general staff of the American Company includes an engineering force, working on both plant and traffic engineering, an accounting force, a legal department, dealing with patents and giving attention to general legal matters, and an executive force, advising and assisting in all questions that may arise, besides directing all financial aid furnished by the American Company to the associated companies. The general staff undertakes to solve all problems of engineering that may arise and its work includes, besides devising apparatus, testing and improvement of apparatus devised by others, the ascertainment of the

practicability of such apparatus and the recommending of it, in proper form, to the associated companies.

It is contended by the complainant and intervening stockholders that the Central Union Company could have gone into the open market and purchased telephone instruments reasonably adequate for its purposes; that it was not permitted to buy or rent instruments from the Western Electric Company or from other manufacturers, although efficient instruments were sold subsequent to the year 1908 by the Western Electric Company upon the open market and other manufacturers were also making and selling telephone instruments in large quantities; that the work of the general staff consisted mainly of the interchange of ideas with the associated companies, and that the associated companies gave as much as they received; that the various inventions and developments of the general staff were for the benefit of the operating department of the American Company; that much of the work of the general staff was for the benefit of the Western Electric Company, which is the manufacturing subsidiary of the American Company; that services similar to those of the general staff of the American Company are rendered gratuitously by so-called independent manufacturers to their customers, and that many of the inventions and practices recommended by the general staff to the Central Union Company were common knowledge in the art.

On this subject much of the testimony went to determine the amount actually paid and what would have been a fair rental for the use of the instruments during the year 1914, that year being taken as fairly indicative of conditions for other years. The amounts chargeable to Peoria for the 4½ per cent payment, as shown by Commission Exhibit 1, are: For the year 1913, $11,754; 1914, $13,305; and 1915, $14,098, an average yearly charge of $13,053. As shown by C. U. Exhibit 32, the number of connected stations in Peoria on December 31, 1913, was 12,354; on December 31, 1914, 12,628; and on December 21, 1915, 13,138, an average of 12,707 connected stations.

An analysis of Account 527, "License Revenue, Dr.," to which the 4½ per cent payments to the American Company are charged, as provided by the uniform system of accounts prescribed by this Commission, was made by the accounting department of the Commission.

Counsel for the intervening stockholders contend that the credits under Account 527 should not be considered in arriv-

ing at the amount of expense properly chargeable to Peoria for the 4½ per cent payment and there was considerable discussion regarding the propriety of making the deductions. After carefully considering all the evidence in support of Commission Exhibit 7, we are of the opinion that the amounts charged under Account 527, "License Revenue, Dr.," as shown by Commission Exhibit 1, (Table II.), should be accepted as the amounts properly chargeable to Peoria. The average annual charge against the Peoria exchange for the three-year period, 1913 to 1915, inclusive, therefore, is $13,053, and the average annual charge per station is approximately $1.03.

It appears that the American Company pays to the Western Electric Company, the sum of $2.50 per set of instruments; that this amount includes the cost to the Western Electric Company for the manufacture of such instruments, plus a profit of 20 per cent; and that the Central Union Company is permitted to return, for repairs or for replacement by new instruments, any instruments which have become defective.

There is a sharp conflict as to what would be the fair rental value of these instruments and there is evidence from which it may be fairly concluded that instruments not of the exact type, but similar in construction and capable of rendering efficient service, manufactured by the Western Electric Company's competitors could be bought in the open market during the year 1914 at prices ranging from $2.50 to $3.00 per set.

This Commission is not especially interested in what manner the profits of the respondent company may be divided among its stockholders. It is, however, directly interested in the reasonablenes and justness of an item of expense which is sought to be capitalized and become the basis for charges paid by the public. It becomes the duty therefore of this Commission to consider whether the charge of 4½ per cent of the gross receipts of respondent is fair and reasonable for the contract services rendered by the American Company to the respondent. It is not the province of the Commission to definitely pass upon or decide the legality of the questions now being considered by the courts of this State in the Read case, except insofar as a decision of such questions is necessary to a correct decision by this Commission in the case now before it. The propriety of the so-called 4½ per cent charge has been considered by many State Utility commissions and they have not been uniform in their findings and conclusions.

The question was fully presented to this Commission in this case and the legal phases were ably argued by learned counsel representing every interest affected. The only justification for this charge is the contract of 1902 between the American Company and respondent and the services therein mentioned in the rental of the receivers, transmitters and the induction coils, and there can be no serious contention but that the charge of 4½ per cent of the gross receipts of respondent is an unfair and unreasonable charge for the services specified in said contract and which are the only services this Commission can consider in determining this question.

It is urged on behalf of the American Company that it maintains an engineering and accounting staff, a legal department dealing with patent matters as well as general legal questions, and executive department advising and assisting on all questions that may arise and directing financial aid and assistance to its subsidiary corporations, and that respondent has been receiving all such assistance without other charge than the 4½ per cent charge in question. The Commission is not passing on the necessity or value of such assistance to the respondent, but cannot consider it in the absence of any contract or agreement defining the nature and necessity of such services and the reasonable compensation which should be exacted for each and every one of them, and in the absence of such contract or agreement this Commission can only consider such services as voluntary contributions from the American Company to the respondent, justified by reason of its stock ownership and direct control. The Commission will therefore consider what is a just and reasonable charge to allow the American Company as rental for the equipment owned by it and used by respondent in the operation of its plant at Peoria.

There is conflict in the evidence as to the value of the equipment furnished by the American Company to the respondent, but considering all the facts submitted under the evidence in this case the Commission is of the opinion that $2.75 each is the fair value of the equipment although there is reliable evidence in the record which might justify a lower value. On such value the following computation seems to indicate a proper method of arriving at the fair rental value of the equipment so furnished:

VALUE OF EQUIPMENT, EACH $2.75.

Depreciation 7 per cent Return 7 per cent	= 14 per cent	= $ .3850
Taxes		.0465
Possible repairs		.0501
Contingencies 2 per cent		.055
		$ .5366

Disregarding the instruments held in reserve by the American Company for the Central Union Company, it appears that an allowance of 55 cents per set per annum will be adequate. It appears that no consideration should be given to the instruments held in reserve by the American Company, since the reserve of 3 per cent in the Central Union Company's possession would seem to be ample to meet all requirements, except in cases of extraordinary contingencies, and we see no reason why a reserve stock of instruments should be provided when this policy is not generally followed with other lines of equipment.

As shown in the discussion of Account 527 "License Revenue, Dr.," the average annual charge to the Peoria exchange for the 4½ per cent payment for the years 1913 to 1915, inclusive, amounts to $13,053 or approximately $1.03 per station per year. Of this amount, it appears that 55 cents would be a reasonable payment for the use of the instruments, leaving a difference of 48 cents between the total average annual charge per station for the 4½ per cent payment and the amount properly chargeable as instrument rental. On the basis of 55 cents per set, the average annual charge for instrument rental for the period 1913 to 1915, inclusive, would amount to $6,989 and the excess payment of 48 cents per station would amount to $6,081. In accordance with the views of the Commission it is not proper to include in the operating expenses the charge represented by the difference between the total average annual charge for the 4½ per cent payment and the amount properly chargeable as instrument rental, and accordingly, we have adjusted the charge under Account 527, "License Revenue, Dr.," to cover only the amount properly chargeable for instrument rental.

With the adjustment in the income account through the deduction of the item of $11,810.79 procedure expense, and the addition of the sum of $7,275.36, one-fifth of the total pro-

cedure expense, in the 1915 statement, the adjustment in the charge for depreciation, and the adjustment in the charge under Account 527, "License Revenue, Dr.," the net average annual income for the three-year period under consideration is $80,993.

CITY EXHIBIT 93.

IN THE

DISTRICT COURT OF THE UNITED STATES

FOR THE NORTHERN DISTRICT OF ILLINOIS

EASTERN DIVISION.

Illinois Bell Telephone Company, *Plaintiff*, vs. Frank L. Smith, Cicero, J. Lindly, Hal W. Trovillion, P. H. Moynihan, James F. Sullivan, Alex J. Johnson and William J. Smith, the persons constituting the Illinois Commerce Commission of the State of Illinois, and Edward J. Brundage, Attorney General of the State of Illinois, *Defendants.*	In Equity, No. 3746.

AFFIDAVIT OF GEORGE WILLIS CUMMINGS.

STATE OF ILLINOIS, } ss.
COUNTY OF COOK. }

GEORGE WILLIS CUMMINGS, of Chicago, being duly sworn on oath deposes and says that he is a telephone engineer and has for the past nine years been in the employ of J. G. Wray & Co., with offices in the City of Chicago, which firm has an extensive practice in this country and Canada and deals with all questions arising in connection with telephone engineering, passing on rate schedules, character of service, construction, operation and valuation of telephone properties, and that this affiant has in the course of his employment had to do with all classes of such questions.

That this affiant prior to his employment by said firm of telephone engineers was for a period of six (6) years between 1914 and 1920 in the employ of the City of Chicago as chief of the Telephone Bureau, and it was his duty as such official to keep advised of the telephone rates charged in the City of Chicago by the plaintiff in this cause then there operating under the name of the Chicago Telephone Company and the different classes of service rendered by it. That in the course of his employment he made frequent studies of the different telephone rates from time to time in effect.

That for many years prior to his last mentioned employment he was engaged in the construction, maintenance and operation of different telephone plants, and that he has been continuously employed in the telephone business for the past thirty-three (33) years. That from time to time this affiant has been personally engaged in special studies and analyses of the rates which have been in force in the City of Chicago for different classes of telephone service furnished by the plaintiff since the effective date of the ordinance granted in 1907 to the Chicago Telephone Company, including the present rates which were put into effect by the order of the Illinois Public Utilities Commission entered in December, 1920, and the proposed new rates prescribed by the order of the Illinois Commerce Commission dated August 16, 1923, to become effective October 1, 1923, which order changes only four (4) classes of rates, to-wit, the single nickel coin box business, the two-party nickel coin box business, the two-party nickel coin box residence, and the four-party nickel coin box residence classes of service, these constituting the only nickel coin box service now in use in the City of Chicago.

That attached hereto and marked "Exhibit A" is a digest of all of the different classes of rates that have been in effect in the City of Chicago during the period in question and the four (4) proposed new rates prescribed in said order of the Illinois Commerce Commission. That as appears from said Exhibit A the rate prescribed by said order of the Illinois Commerce Commission for four-party nickel coin box subscribers—the principal class of subscribers affected by this order—is more liberal to the company than any rate that was effective in Chicago for the same class of service at any time between June 16, 1913, and the date of the order of the Illinois Public Utilities Commission in December, 1920, fixing the present rates, inasmuch as said order of the Illinois Commerce Commission fixes the guarantee to be paid by such four-

party nickel subscribers at seven and one-half cents (7½c) per day, which is more than the guarantee required at any time during the period above mentioned, and said order of the Illinois Commerce Commission fixes the charge for excess messages at four cents (4c) per message, which is the same rate prescribed by the city ordinance of 1913), the Postmaster General's order of 1919, when operating the telephone properties, and the order of the Illinois Public Utilities Commission entered in 1919.

DISCRIMINATION IN PRESENT RATES.

And this affiant says that the rates at present in effect for the four classes of nickel coin box service, above referred to and which are changed by the order of the Illinois Commerce Commission of August 16, 1923, are substantially higher than the rates for measured service in both business and residence classes; that the amount of the excessive charge against the nickel subscriber as compared with a measured service subscriber depends to a considerable extent upon the number of messages per month. That in order to demonstrate this relationship between varying telephone users for the two classes of service this affiant has prepared and attaches hereto "Exhibit B" showing the aggregate charges per month to the two different classes of subscribers for numbers of messages ranging from 20 to 400 per month under the rates now in effect.

That as appears from said Exhibit B, for business service the monthly charges for both single nickel (Col. *c*) and two party nickel (Col. *d*) service are substantially higher than for the single measured service (Col. *b*) for any number of messages per month. That up to 80 messages per month the single nickel subscriber pays two dollars ($2.00) per month more than the single measured service subscriber. That between 80 and 200 calls per month the single nickel subscriber pays an additional amount varying between 40 cents and $2.00 per month, while at 400 calls per month the single nickel subscriber would pay $4.20 per month more than the man with the single measured service. That this discrepancy would increase still further if there were a greater number of calls.

That in the residence service the two party nickel subscriber (Col. *g*) would pay more per month than the two party measured service subscriber (Col. *f*) for any number of messages per month. That the difference between what the two party nickel subscriber would pay and that which the two party measured service subscriber would pay would amount

to one dollar ($1) per month up to 55 messages per month, and from twenty cents (20*c*) to ninety-five cents (95*c*) per month when the number of messages is between 55 and 150 per month, and as high as $4.45 per month for 400 messages per month.

That the four party nickel service (Col. *h*), which is generally supposed to supply telephone service at low cost to the small user, is but five cents (5*c*) a month cheaper than the two party measured service (Col. *f*) for messages up to 54 per month. That for messages ranging from 75 to 400 per month the four party nickel service costs the subscriber from twenty cents (20*c*) to four dollars and forty-five cents ($4.45) per month more than the two party measured service. That for messages in excess of 75 per month the four party nickel service costs the subscriber even more than the single measured service (Col. *e*) by amounts ranging from five cents (5*c*) to four dollars and twenty-five cents ($4.25) per month. That as in the case of business service the difference between the cost of the subscriber of nickel and measured residence service increases with any increase in the number of messages, this being due to the lack of any sliding scale for excess calls on nickel service.

Proposed Changes in Nickel Rates.

The order of the Illinois Commerce Commission, entered August 16, 1923, decreases slightly the rates for nickel service thereby tending to equalize more nearly the charges for nickel and measured service and to decrease the excessive load which had been placed upon the nickel subscriber. That even under the proposed rates the nickel subscriber would be called upon to pay more than the measured service subscriber for the number of messages which would normally be used per month by subscribers to both classes of service. That the exact relationship of the monthly charges to the two classes of subscribers for messages ranging from 20 to 400 per month is shown on "Exhibit C" attached hereto.

That as appears on Exhibit C the business subscriber under the proposed substituted rates (as under the present rates) pays more for single nickel service (Col. *c*) than for single measured business service (Col. *b*) for any number of messages per month. That the excess so paid by the nickel business subscriber would amount to one dollar and forty cents ($1.40) for 80 (or less) messages per month, and from twenty-eight cents (28*c*) to one dollar and twenty-eight cents ($1.28)

per month for massages from 108 to 400 per month. That the two party nickel subscriber (Col. *d*) would pay but ten cents (10*c*) less than the single measured service subscribed (Col. *b*) for a small number of messages, and from twenty-eight cents (28*c*) to one dollar and thirty cents ($1.30) more per month for messages ranging from 108 to 400 per month.

That in the residence service the two-party nickel subscriber (Col. *g*) would pay more for any number of calls than would the two-party measured service subscriber (Col. *f*), to-wit, fifty-five cents (55*c*) more per month for less than 55 messages per month and from eleven cents (11*c*) to one dollar and eleven cents ($1.11) more for messages ranging from 60 to 400 per month. That the four-party nickel subscriber (Col. *h*) gets his telephone service only fifty cents (50*c*) per month cheaper than the two-party measured service subscriber (Col. *f*) for messages below 45 per month. That for 55 messages per month the four-party nickel subscriber would pay the same rate as the two-party measured service subscriber while for messages in excess of 60 per month the four-party nickel subscriber (Col. *h*) would pay more than the two-party measured service subscriber (Col. *f*), the amount of such excess for the higher number of messages ranging from five cents (5*c*) to one dollar and five cents ($1.05) per month. That with any increase in the number of messages over and above those shown in these exhibits, the amount by which the charges to be paid by the nickel subscriber would exceed those paid by the measured service subscriber—that is to say the spread between the two classes of rates—would increase.

That while the new rates authorized under the order of the Illinois Commerce Commission, dated August 16, 1923, for the four classes of nickel coin box users reduces to some extent the discrimination now in effect against these classes of service, the new rates ordered into effect by the Illinois Commerce Commission would not in the opinion of this affiant completely do away with the discrimination which now exists, and under these new rates for the same number of messages the nickel coin box subscribers would still be paying more than the measured service subscriber for what obviously is poorer service.

That an advantage accrues to the plaintiff from the nickel service in that the nickel service corresponds roughly to business done on a cash basis whereas the measured service amounts to a credit business. That ordinary business practice would grant a discount to a cash customer, comparable to the

EXHIBIT A

AUTHORIZED TELEPHONE RATES, CHICAGO, ILLINOIS

CLASS OF SERVICE	(A) CITY ORDINANCE	(B) CITY ORDINANCE	(C) POSTMASTER GENERAL	(D) PUBLIC
	Passed 11-6-07 Effective 12-2-07	Passed 5-26-13 Effective 6-16-13	Approved 3-19-19 Effective 6-16-19	Approved 7-31-19 Effective 8-1-19
BUSINESS (METROPOLITAN)				
(1) Flate Rate (Exch.)	$125.00 per year	$125 per yr. for exist. subs. only	X	X
(2) Flat Rate (P.B.X.)	$1.00 per day	$1.00 per day " " " "	X	X
(3) Limited Flat Rate	X	500 mess. per mo. $10.42 Add. mess. @ 2c	X	X
(4) Measured Single	1200 mess. per yr. $60 1200 add. mes. @ 3c 1200 " " @ 2½c All Mess. over 3600 @ 2c	1200 mess. per yr. $60 1200 add. mess. @ 3c 1200 " " @ 2½c All mess. over 3600 @ 2c	80 mess. per mo. $4.00 20 add. mess. @ 5c 100 " " @ 4c 100 " " @ 3c All mess. over 300 @ 2½c	80 mess. per mo. $4.00 20 add. mess. @ 5c 100 " " @ 4c 100 " " @ 3c All mess. over 300 @ 2½c
(5) Measured Single	X	960 mess. per yr. $48 240 add. mess. @ 5c 1200 add. mess. @ 3c 1200 " " @ 2½c All mess. over 3600 @ 2c		
(6) (Inc. two lines)	7200 mess. per yr. $198 Add. Mess. @ 2c	7200 mess. per yr. $198 Add. mess. @ 2c	X	X
(7) (Aux. to 6)	6000 mess. per yr. $120	6000 mess. per yr. $120	X	X
(8) (Aux. to 2, 4 & 6)	(Inc. no mess.) $2 mo.	(Inc. no mess.) $2 per mo.	(Inc. no mess.) $2 per mo.	(Inc. no mess.) $2 per mo.
(9) Single Nickel	4 mess. per day 20c Add. mess. @ 5c	4 mess. per day 20c Add. mess. @ 4c	4 mess. per day 20c Add. mess. @ 4c	4 mess. per day 20c Add. mess. @ 4c
(10) Two-Party Nickel	2½ mess. per day 12½c Add. mess. @ 5c	2½ mess. per day 12½c Add. mess. @ 4c	2½ mess. per day 12½c Add. mess. @ 4c	2½ mess. per day 12½c Add. mess. @ 4c
(NEIGHBORHOOD)				
(11) Single Line	$48 per year	$48 per year	X	X
(12) Two-Party Line	$36 " "	$36 " "	X	X
(13) Four-Party	$24 " "	$24 " "	X	X
RESIDENCE (METROPOLITAN)				
(14) Flat Rate Single	$72 per year	$72 per year	X	X
(15) Flat Rate Two-Party	$56 " "	$56 " "	X	X
(16) Measured Single	X	800 mess. per yr. $40 400 add. mess. @ 4c 1200 add. mess. @ 3c 1200 " " @ 2½c All mess. over 3600 @ 2c	75 mess. per mo. $3.75 50 add. mess. @ 4c 50 " " @ 3c All mess. over 175 @ 2½c	75 mess. per mo. $3.75 50 add. mess. @ 4c 50 " " @ 3c All mess. over 175 @ 2½c
(17) Measured Two-Party	X	X	55 mess. per mo. $2.75 Add mess. @ 4c	55 mess. per mo. $2.75 Add mess. @ 4c
(18) Two-Party Nickel	2 mess. per day 10c Add. mess. @ 5c	2 mess. per day 10c Add. mess. @ 4c	2 mess. per day 10c Add. mess. @ 4c	2 mess. per day 10c Add. mess. @ 4c
(19) Four-Party Nickel	1 mess. per day 5c Add. mess. @ 5c	1 mess. per day 5c Add. mess. @ 4c	1.3 mess. per day 6½c Add. mess. @ 4c	1 mess. per day 5c Add. mess. @ 4c
(NEIGHBORHOOD)				
(20) Single Line	$36 per year	$36 per year	X	X
(21) Two-Party Line	$24 " "	$24 " "	X	X
(22) Four-Party Line	$18 " "	$18 " "	X	X
MISCELLANEOUS				
(23) P.B.X. Boards	X	X	Cordless, per mo. $1.50 Non-mult. 1- 10 lines, $2 " " 11- 30 " 3 " " 31- 60 " 4 " " 61-100 " 5 " " 101-150 " 6 " " 151-200 " 7 " " 201-260 " 8 " " 261-320 " 9 Mult. per pos. 10 " jacks per strip 15c	Cordless, per mo. $1.50 Non-mult. 1- 10 lines, $2 " " 11- 30 " 3 " " 31- 60 " 4 " " 61-100 " 5 " " 101-150 " 6 " " 151-200 " 7 " " 201-260 " 8 " " 261-320 " 9 Mult. per pos. 10 " jacks per strip 15c
(24) P.B.X. Terminals	50c per mo.	50c per mo.	50c per mo.	50c per mo.
(25) Extensions—Bus.	50c " "	50c " "	50c " "	50c " "
(26) " —Res.	50c " "	50c " "	50c " "	50c " "
(27) P. L. Stations	50c " "	50c " "	50c " "	50c " "
(28) Substation Meter	X	$3.00 Installation charge	50c " "	50c " "

EXHIBIT A

THORIZED TELEPHONE RATES, CHICAGO, ILLINOIS

(C) POSTMASTER GENERAL	(D) PUBLIC UTILITIES COMMISSION OF ILLINOIS	(E) PUBLIC UTILITIES COMMISSION OF ILLINOIS	(F) PUBLIC UTILITIES COMMISSION OF ILLINOIS	(G) ILLINOIS COMMERCE COMM.
Approved 3-19-19 Effective 6-16-19	Approved 7-31-19 Effective 8-1-19	Approved 11-29-19 Effective 12-1-19	Approved 12-20-20 Effective 1-1-21	Approved 8-16-23
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
ss. per mo. $4.00	80 mess. per mo. $4.00	80 mess. per mo. $4.00	80 mess. per mo. $4.00	80 mess. per mo. $4.00
d. mess. @ 5c	20 add. mess. @ 5c	20 add. mess. @ 5c	120 add. mess. @ 4c	120 add. mess. @ 4c
" @ 4c	100 " " @ 4c	100 " " @ 4c	All mess. over 200 @ 3½c	All mess. over 200 @ 3½c
" @ 3c	100 " " @ 3c	100 " " @ 3c		
ss. over 300 @ 2½c	All mess. over 300 @ 2½c	All mess. over 300 @ 2½c		
X	X	X	X	X
X	X	X	X	X
o mess.) $2 per mo.	(Inc. no mess.) $2 per mo.	(Inc. no mess.) $2 per mo.	(Inc. no mess.) $2 per mo.	(Inc. no mess.) $2 per mo.
s. per day 20c	4 mess. per day 20c	4 mess. per day 20c	120 mess. per mo. $6.00	108 mess. per mo. $5.40
ness. @ 4c	Add. mess. @ 4c	Add. mess. @ 4c	Add. mess. @ 5c	Add. mess. @ 4c
ss. per day 12½c	2½ mess. per day 12½c	2½ mess. per day 12½c	90 mess. per mo. $4.50	78 mess. per mo. $3.90
ness. @ 4c	Add. mess. @ 4c	Add. mess. @ 4c	Add. mess. @ 5c	(32 add. mess. @ 5c
				(All mess. over 110 @ 4c
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
ss. per mo. $3.75	75 mess. per mo. $3.75	75 mess. per mo. $3.75	75 mess. per mo. $3.75	75 mess. per mo. $3.75
l. mess. @ 4c	50 add. mess. @ 4c	50 add. mess. @ 4c	125 add. mess. @ 4c	125 add. mess. @ 4c
" @ 3c	50 " " @ 3c	50 " " @ 3c	All mess. over 200 @ 3½c	All mess. over 200 @ 3½c
ss. over 175 @ 2½c	All mess. over 175 @ 2½c	All mess. over 175 @ 2½c		
ss. per mo. $2.75	55 mess. per mo. $2.75	55 mess. per mo. $2.75	55 mess. per mo. $2.75	55 mess. per mo. $2.75
ess. @ 4c	Add mess. @ 4c	Add mess. @ 4c	145 add. mess. @ 4c	145 add. mess. @ 4c
			All mess. over 200 @ 3½c	All mess. over 200 @ 3½c
s. per day 10c	2 mess. per day 10c	2 mess. per day 10c	75 mess. per mo. $3.75	66 mess. per mo. $3.30
ness. @ 4c	Add. mess. @ 4c	Add. mess. @ 4c	Add. mess. @ 5c	Add. mess. @ 4c
ss. per day 6½c	1 mess. per day 5c	1 mess. per day 5c	1.8 mess. per day 9c	45 mess. per mo. $2.25
ness. @ 4c	Add. mess. @ 4c	Add. mess. @ 4c	Add. mess. @ 5c	15 add. mess. @ 5c
				(All mess. over 60 @ 4c
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
ss, per mo. $1.50	Cordless, per mo. $1.50	Cordless, per mo. $1.50	Cordless, per mo. $3.00	Cordless, per mo. $3.00
ult. 1- 10 lines, $2	Non-mult. 1- 10 lines, $2	Non-mult. 1- 10 lines, $2	Non-mult. 1-30 lines, $6	Non-mult. 1-30 lines, $6
" 11- 30 " 3	" " 11- 30 " 3	" " 11- 30 " 3	Ea. add. strip 10 jacks, $1	Ea. add. strip 10 jacks, $1
" 31- 60 " 4	" " 31- 60 " 4	" " 31- 60 " 4	Mult. board:—based on cost of swbd. and wiring	Mult. board:—based on cost of swbd. and wiring
" 61-100 " 5	" " 61-100 " 5	" " 61-100 " 5		
" 101-150 " 6	" " 101-150 " 6	" " 101-150 " 6		
" 151-200 " 7	" " 151-200 " 7	" " 151-200 " 7		
" 201-260 " 8	" " 201-260 " 8	" " 201-260 " 8		
" 261-320 " 9	" " 261-320 " 9	" " 261-320 " 9		
per pos. 10	Mult. per pos. 10	Mult. per pos. 10		
acks per strip 15c	" jacks per strip 15c	" jacks per strip 15c		
r mo.	50c per mo.	50c per mo.	Without dial 75c per mo.	Without dial 75c per mo.
			With dial $1.00 per mo.	With dial $1.00 per mo.
"	50c " "	50c " "	75c per mo.	75c per mo.
"	50c " "	50c " "	50c " "	50c " "
"	50c " "	50c " "	75c " "	75c " "
"	50c " "	50c " "	50c " "	50c " "

		Add. mess. @ 2c		
(4) Measured Single	1200 mess. per yr. $60 1200 add. mes. @ 3c 1200 " " @ 2½c All Mess. over 3600 @ 2c	1200 mess. per yr. $60 1200 add. mess. @ 3c 1200 " " @ 2½c All mess. over 3600 @ 2c	80 mess. per mo. $4.00 20 add. mess. @ 5c 100 " " @ 4c 100 " " @ 3c All mess. over 300 @ 2½c	80 mess. per mo. $4.00 20 add. mess. @ 5c 100 " " @ 4c 100 " " @ 3c All mess. over 300 @ 2½c
(5) Measured Single	X	960 mess. per yr. $48 240 add. mess. @ 5c 1200 add. mess. @ 3c 1200 " " @ 2½c All mess. over 3600 @ 2c		
(6) (Inc. two lines)	7200 mess. per yr. $198 Add. Mess. @ 2c	7200 mess. per yr. $198 Add. mess. @ 2c	X	X
(7) (Aux. to 6)	6000 mess. per yr. $120	6000 mess. per yr. $120	X	X
(8) (Aux. to 2, 4 & 6)	(Inc. no mess.) $2 mo.	(Inc. no mess.) $2 per mo.	(Inc. no mess.) $2 per mo.	(Inc. no mess.) $2 per mo.
(9) Single Nickel	4 mess. per day 20c Add. mess. @ 5c	4 mess. per day 20c Add. mess. @ 4c	4 mess. per day 20c Add. mess. @ 4c	4 mess. per day 20c Add. mess. @ 4c
(10) Two-Party Nickel	2½ mess. per day 12½c Add. mess. @ 5c	2½ mess. per day 12½c Add. mess. @ 4c	2½ mess. per day 12½c Add. mess. @ 4c	2½ mess. per day 12½c Add. mess. @ 4c
(NEIGHBORHOOD)				
(11) Single Line	$48 per year	$48 per year	X	X
(12) Two-Party Line	$36 " "	$36 " "	X	X
(13) Four-Party	$24 " "	$24 " "	X	X
RESIDENCE (METROPOLITAN)				
(14) Flat Rate Single	$72 per year	$72 per year	X	X
(15) Flat Rate Two-Party	$56 " "	$56 " "	X	X
(16) Measured Single	X	800 mess. per yr. $40 400 add. mess. @ 4c 1200 add. mess. @ 3c 1200 " " @ 2½c All mess. over 3600 @ 2c	75 mess. per mo. $3.75 50 add. mess. @ 4c 50 " " @ 3c All mess. over 175 @ 2½c	75 mess. per mo. $3.75 50 add. mess. @ 4c 50 " " @ 3c All mess. over 175 @ 2½c
(17) Measured Two-Party	X	X	55 mess. per mo. $2.75 Add mess. @ 4c	55 mess. per mo. $2.75 Add mess. @ 4c
(18) Two-Party Nickel	2 mess. per day 10c Add. mess. @ 5c	2 mess. per day 10c Add. mess. @ 4c	2 mess. per day 10c Add. mess. @ 4c	2 mess. per day 10c Add. mess. @ 4c
(19) Four-Party Nickel	1 mess. per day 5c Add. mess. @ 5c	1 mess. per day 5c Add. mess. @ 4c	1.3 mess. per day 6½c Add. mess. @ 4c	1 mess. per day 5c Add. mess. @ 4c
(NEIGHBORHOOD)				
(20) Single Line	$36 per year	$36 per year	X	X
(21) Two-Party Line	$24 " "	$24 " "	X	X
(22) Four-Party Line	$18 " "	$18 " "	X	X
MISCELLANEOUS				
(23) P.B.X. Boards	X	X	Cordless, per mo. $1.50 Non-mult. 1- 10 lines, $2 " " 11- 30 " 3 " " 31- 60 " 4 " " 61-100 " 5 " " 101-150 " 6 " " 151-200 " 7 " " 201-260 " 8 " " 261-320 " 9 Mult. per pos. 10 " jacks per strip 15c	Cordless, per mo. $1.50 Non-mult. 1- 10 lines, $2 " " 11- 30 " 3 " " 31- 60 " 4 " " 61-100 " 5 " " 101-150 " 6 " " 151-200 " 7 " " 201-260 " 8 " " 261-320 " 9 Mult. per pos. 10 " jacks per strip 15c
(24) P.B.X. Terminals	50c per mo.	50c per mo.	50c per mo.	50c per mo.
(25) Extensions—Bus.	50c " "	50c " "	50c " "	50c " "
(26) " —Res.	50c " "	50c " "	50c " "	50c " "
(27) P. L. Stations	50c " "	50c " "	50c " "	50c " "
(28) Substation Meter	X	$3.00 Installation charge	New Installation—$3.50 L. & I. 1.50	X
(29) Service Connection	X	X	New Installation— 3.50 L. & I. 1.50	New inst. not to exceed $5. L. & I. " " " 1
(30) Move	Not specified	New inst. not to exceed $5.00	All cases 3.00	Business " " " 5
(31) Change Location	" "	L. & I. " " " 1.00 Business " " " 5.00 Residence " " " 2.50		Residence " " " 2 Business " " " 5
(32) Change Set	" "	Business " " " 5.00 Residence " " " 2.50	All cases 3.00	Residence " " " 2
(33) Change Name	" "	Not specified	L. & I. 1.50	Not specified

[illegible] @ 4c	100 " " @ 4c	100 " " @ 4c	All mess. over 200 @ 3½c	All mess. over 200 @ 3½c
" " @ 3c	100 " " @ 3c	100 " " @ 3c		
ness. over 300 @ 2½c	All mess. over 300 @ 2½c	All mess. over 300 @ 2½c		
X	X	X	X	X
X	X	X	X	X
no mess.) $2 per mo.	(Inc. no mess.) $2 per mo.	(Inc. no mess.) $2 per mo.	(Inc. no mess.) $2 per mo.	(Inc. no mess.) $2 per mo.
ss. per day 20c	4 mess. per day 20c	4 mess. per day 20c	120 mess. per mo. $6.00	108 mess. per mo. $5.40
mess. @ 4c	Add. mess. @ 4c	Add. mess. @ 4c	Add. mess. @ 5c	Add. mess. @ 4c
ness. per day 12½c	2½ mess. per day 12½c	2½ mess. per day 12½c	90 mess. per mo. $4.50	78 mess. per mo. $3.90
mess. @ 4c	Add. mess. @ 4c	Add. mess. @ 4c	Add. mess. @ 5c	(32 add. mess. @ 5c
				(All mess. over 110 @ 4c
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
ess. per mo. $3.75	75 mess. per mo. $3.75	75 mess. per mo. $3.75	75 mess. per mo. $3.75	75 mess. per mo. $3.75
d. mess. @ 4c	50 add. mess. @ 4c	50 add. mess. @ 4c	125 add. mess. @ 4c	125 add. mess. @ 4c
" @ 3c	50 " " @ 3c	50 " " @ 3c	All mess. over 200 @ 3½c	All mess. over 200 @ 3½c
ess. over 175 @ 2½c	All mess. over 175 @ 2½c	All mess. over 175 @ 2½c		
ss. per mo. $2.75	55 mess. per mo. $2.75	55 mess. per mo. $2.75	55 mess. per mo. $2.75	55 mess. per mo. $2.75
mess. @ 4c	Add mess. @ 4c	Add mess. @ 4c	145 add. mess. @ 4c	145 add. mess. @ 4c
			All mess. over 200 @ 3½c	All mess. over 200 @ 3½c
ss. per day 10c	2 mess. per day 10c	2 mess. per day 10c	75 mess. per mo. $3.75	66 mess. per mo. $3.30
mess. @ 4c	Add. mess. @ 4c	Add. mess. @ 4c	Add. mess. @ 5c	Add. mess. @ 4c
ess. per day 6½c	1 mess. per day 5c	1 mess. per day 5c	1.8 mess. per day 9c	45 mess. per mo. $2.25
mess. @ 4c	Add. mess. @ 4c	Add. mess. @ 4c	Add. mess. @ 5c	15 add. mess. @ 5c
				(All mess. over 60 @ 4c
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
ess. per mo. $1.50	Cordless, per mo. $1.50	Cordless, per mo. $1.50	Cordless, per mo. $3.00	Cordless, per mo. $3.00
ult. 1- 10 lines, $2	Non-mult. 1- 10 lines, $2	Non-mult. 1- 10 lines, $2	Non-mult. 1-30 lines, $6	Non-mult. 1-30 lines, $6
" 11- 30 " 3	" " 11- 30 " 3	" " 11- 30 " 3	Ea. add. strip 10 jacks, $1	Ea. add. strip 10 jacks, $1
" 31- 60 " 4	" " 31- 60 " 4	" " 31- 60 " 4	Mult. board:—based on cost of swbd. and wiring	Mult. board:—based on cost of swbd. and wiring
" 61-100 " 5	" " 61-100 " 5	" " 61-100 " 5		
" 101-150 " 6	" " 101-150 " 6	" " 101-150 " 6		
" 151-200 " 7	" " 151-200 " 7	" " 151-200 " 7		
" 201-260 " 8	" " 201-260 " 8	" " 201-260 " 8		
" 261-320 " 9	" " 261-320 " 9	" " 261-320 " 9		
per pos. 10	Mult. per pos. 10	Mult. per pos. 10		
jacks per strip 15c	" jacks per strip 15c	" jacks per strip 15c		
er mo.	50c per mo.	50c per mo.	Without dial 75c per mo.	Without dial 75c per mo.
			With dial $1.00 per mo.	With dial $1.00 per mo.
"	50c " "	50c " "	75c per mo.	75c per mo.
"	50c " "	50c " "	50c " "	50c " "
"	50c " "	50c " "	75c " "	75c " "
"	50c " "	50c " "	50c " "	50c " "
	X	X		
Installation—$3.50	New inst. not to exceed $5.00	Not specified	All cases $3.50	All cases $3.50
1.50	L. & I. " " " 1.00			
Installation— 3.50	Business " " " 5.00	All cases $3.00	All cases exc. Res., L. & I. $3.50	All cases exc. Res., L. & I. $3.50
1.50	Residence " " " 2.50		Res. L. & I. no charge	Res. L. & I. no charge
ses 3.00	Business " " " 5.00	All cases $3.00	All cases $3.00	All cases $3.00
ses 3.00	Residence " " " 2.50			
1.50	Not specified	Not specified	Not specified	Not specified

nickle 'phone user, rather than penalize him with a higher charge than that exacted from the credit customer, comparable to the measured service subscriber.

And this affiant further says that his conclusion is that in spite of the reductions in nickel service rates ordered by the Illinois Commerce Commission on August 16, 1923, the proposed rates for such service, if permitted to go into effect, would still be, though to a lesser degree than at present, discriminatory against the users of such nickel service.

GEORGE WILLIS CUMMINGS.

Subscribed and sworn to before me, a notary public, this 10th day of April, A. D. 1929.

FRANCES SAVAGE,
Notary Public.

(Seal)

Exhibit A. Authorized telephone rates, Chicago, Illinois, as follows:

EXHIBIT B

CHICAGO EXCHANGE RATES
UNDER ORDER OF PUBLIC UTILITIES COMMISSION
EFFECTIVE JAN. 1, 1921
COST PER MONTH

	BUSINESS			RESIDENCE			
A	B	C	D	E	F	G	H
Messages Per Mo.	Single Measured	Single Nickel	Two-Party Nickel	Single Measured	Two-Party Measured	Two-Party Nickel	Four-Party Nickel
20	$ 4.00	$ 6.00	$ 4.50	$ 3.75	$ 2.75	$ 3.75	$ 2.70
40	4.00	6.00	4.50	3.75	2.75	3.75	2.70
54	4.00	6.00	4.50	3.75	2.75	3.75	2.70
55	4.00	6.00	4.50	3.75	2.75	3.75	2.75
75	4.00	6.00	4.50	3.75	3.55	3.75	3.75
80	4.00	6.00	4.50	3.95	3.75	4.00	4.00
90	4.40	6.00	4.50	4.35	4.15	4.50	4.50
100	4.80	6.00	5.00	4.75	4.55	5.00	5.00
120	5.60	6.00	6.00	5.55	5.35	6.00	6.00
150	6.80	7.50	7.50	6.75	6.55	7.50	7.50
200	8.80	10.00	10.00	8.75	8.55	10.00	10.00
300	12.30	15.00	15.00	12.25	12.05	15.00	15.00
400	15.80	20.00	20.00	15.75	15.55	20.00	20.00

EXHIBIT C

CHICAGO EXCHANGE RATES
UNDER ORDER OF ILLINOIS COMMERCE COMMISSION
APPROVED AUG. 16, 1923
COST PER MONTH

	BUSINESS			RESIDENCE			
A	B	C	D	E	F	G	H
Messages Per Mo.	Single Measured	Single Nickel	Two-Party Nickel	Single Measured	Two-Party Measured	Two-Party Nickel	Four-Party Nickel
20	$ 4.00	$ 5.40	$ 3.90	$ 3.75	$ 2.75	$ 3.30	$ 2.25
40	4.00	5.40	3.90	3.75	2.75	3.30	2.25
45	4.00	5.40	3.90	3.75	2.75	3.30	2.25
55	4.00	5.40	3.90	3.75	2.75	3.30	2.75
60	4.00	5.40	3.90	3.75	2.95	3.30	3.00
66	4.00	5.40	3.90	3.75	3.19	3.30	3.24
75	4.00	5.40	3.90	3.75	3.55	3.66	3.69
78	4.00	5.40	3.90	3.87	3.67	3.78	3.72
80	4.00	5.40	4.00	3.95	3.75	3.86	3.90
108	5.12	5.40	5.40	5.07	4.87	4.98	4.92
110	5.20	5.48	5.50	5.15	4.95	5.06	5.09
150	6.80	7.08	7.10	6.75	6.55	6.66	6.69
200	8.80	9.08	9.10	8.75	8.55	8.66	8.69
300	12.30	13.08	13.10	12.25	12.05	12.66	12.69
400	15.80	17.08	17.10	15.75	15.55	16.66	16.69

City's Exhibit 94.

ILLUSTRATION OF
EFFECT OF WEIGHTING ON INDEX NUMBERS
W. F. SLOAN'S APPRAISALS OF
ILLINOIS BELL TELEPHONE COMPANY PLANT

Year	Exh. No. 86 in Comm. Case No. 11894	Plaintiff's Exh. No. 1 in Federal Court Case	Percent Difference Exh. No. 86 over Exh. No. 1	Exh. No. 86 under Exh. No. 1
Exchange Pole Lines				
1911	100.0	100.0	..	..
1912	114.1	108.7	5.0	..
1913	137.5	135.8	1.3	..
1914	138.1	137.8	.2	..
1915	141.3	149.1	..	5.2
1916	150.6	133.3	13.0	..
1917	165.6	147.3	12.4	..
1918	186.8	185.1	.9	..
Exchange Aerial Cable				
1911	100.0	100.0	..	..
1912	107.1	106.3	.8	..
1913	97.8	105.7	..	7.5
1914	89.7	99.7	..	10.0
1915	102.5	114.0	..	10.1
1916	146.4	144.8	1.1	..
1917	181.9	183.9	..	1.1
1918	188.6	207.6	..	9.2
Exchange Underground Conduit				
1911	100.0	100.0	..	..
1912	109.2	103.0	6.0	..
1913	106.7	105.2	1.4	..
1914	104.2	91.2	14.3	..
1915	93.7	85.6	11.3	..
1916	119.3	107.2	11.3	..
1917	139.6	132.2	5.6	..
1918	165.1	154.1	7.1	..
Exchange Underground Cable				
1911	100.0	100.0	..	..
1912	108.7	111.9	..	2.9
1913	105.3	110.3	..	4.5
1914	99.9	104.2	..	4.1
1915	126.2	113.8	10.9	..
1916	159.7	152.2	4.9	..
1917	176.3	206.6	..	14.7
1918	227.4	240.8	..	5.6

CITY'S EXHIBIT 95.

EXCHANGE POLES TABLE NO. 1

COMPARISON BETWEEN "LABOR INDEXES"

DERIVED FROM SLOAN'S LABOR RATIOS AND SLOAN'S MATERIAL RATIOS

1911	% Increase of Material (1)	Material Index (2)	Each Year's Gross Add. % for Material (3)	% for Labor (4)	% Labor of Material (5)	Extensions (2) x (5) (6)	Labor Index as computed from Sloan's Mat. Ratio (7)	Sloan's Labor Ratio (8)
1911	151.86	100.00	47.4	52.6	111.0	111.00	100.00	100.00
12	131.79	108.66	47.4	52.6	111.0	120.61	108.66	99.88
13	85.44	135.82	58.0	42.0	72.4	98.33	88.58	100.40
14	82.77	137.80	55.1	44.9	81.5	112.31	101.18	103.06
15	68.91	149.11	52.3	47.7	91.2	135.99	122.51	115.52
16	88.96	133.29	54.1	45.9	84.8	113.03	101.83	118.76
17	71.02	147.27	54.2	45.8	84.5	124.44	112.11	121.24
18	36.04	185.14	35.6	64.4	180.9	334.92	301.73	142.81
19	28.11	196.60	40.5	59.5	146.9	288.80	260.18	163.74
1920	12.92	223.04	36.9	63.1	171.0	381.40	343.60	184.05
21	**1.76***	256.27	31.4	68.6	**218.5**	**559.95**	**504.46**	184.71
22	12.77	223.34	26.6	73.4	275.9	616.20	555.14	173.14
23	6.83	235.76	28.6	71.4	249.6	588.46	530.14	170.09
6-30-23	..	251.86		71.4				170.06

*Black type: Red figures.

COMPARISON BETWEEN "LABOR INDEXES"

DERIVED FROM SLOAN'S LABOR RATIOS AND SLOAN'S MATERIAL RATIOS

	% Increase of Material (1)	Material Index (2)	Each Year's Gross Add. % for Material (3)	% for Labor (4)	% Labor of Material (5)	Extension (2) x (5) (6)	Labor Index as computed from Sloan's Mat. Ratio (7)	Labor Index as computed from Sloan's Labor Ratio (8)
1911	65.36	100.00	56.9	43.1	75.7	75.70	100.00	100.00
12	55.62	106.28	56.9	43.1	75.7	80.45	106.27	102.38
13	56.47	105.68	53.6	46.4	86.6	91.52	120.90	102.55
14	65.84	99.71	50.8	49.2	96.8	96.52	127.50	105.85
15	45.08	113.98	53.7	46.3	86.2	98.25	129.79	117.86
16	14.17	144.84	57.9	42.1	72.7	105.30	139.10	119.76
17	**10.06***	183.86	56.2	43.8	**77.9**	**143.23**	189.21	122.18
18	**20.34***	207.58	40.1	59.9	**149.4**	**310.12**	409.67	148.63
19	**5.02***	174.10	42.6	57.4	**134.7**	**234.51**	309.79	168.36
1920	**16.04***	196.95	43.9	56.1	**127.8**	**251.70**	332.50	185.82
21	**10.97***	185.74	48.8	51.2	**104.9**	**194.84**	257.38	181.58
22	5.48	156.77	53.0	47.0	88.7	139.05	183.68	167.71
23	3.37	159.97	57.8	42.2	73.0	116.78	154.27	166.24
6-30-23	..	165.36						166.27

*Black type: Red figures.

EXCHANGE AERIAL WIRE. TABLE NO. 3

COMPARISON BETWEEN "LABOR INDEXES"

DERIVED FROM SLOAN'S LABOR RATIOS AND SLOAN'S MATERIAL RATIOS

	% Increase of Material (1)	Material Index (2)	Each Year's Gross Add. % for Material (3)	% for Labor (4)	% Labor of Material (5)	Extension (2) x (5) (6)	Labor Index as computed from Sloan's Mat. Ratio (7)	Sloan's Labor Ratio (8)
1911	33.99	100.00	38.3	61.7	161.1	161.10	100.00	100.00
12	51.07	88.69	38.3	61.7	161.1	142.88	88.69	99.92
13	28.22	104.50	51.8	48.2	93.0	97.18	60.32	102.89
14	32.96	100.77	43.5	56.5	129.9	130.90	81.25	106.24
15	39.15	96.29	43.3	56.7	130.9	126.04	78.24	110.21
16	24.29	107.80	44.3	55.7	125.7	135.50	84.11	114.94
17	3.91	128.95	49.9	50.1	100.4	129.46	80.36	117.43
18	10.96*	150.48	40.3	59.7	148.1	222.86	138.34	140.38
19	14.96*	157.56	35.5	64.5	181.7	286.29	177.71	156.90
1920	23.04*	174.10	38.9	61.1	157.1	273.51	169.78	174.31
21	4.35*	140.08	34.2	65.8	192.4	269.51	167.29	189.15
22	15.43	116.08	36.7	63.3	172.5	200.24	124.30	181.46
23	10.73	121.01	42.4	57.6	135.8	164.33	102.00	178.92
6-30-23	..	133.99						179.37

*Black type: Red figures.

COMPARISON BETWEEN "LABOR INDEXES"

DERIVED FROM SLOAN'S LABOR RATIOS AND SLOAN'S MATERIAL RATIOS

	% Increase of Material (1)	Material Index (2)	Each Year's % for Material (3)	Gross Add. % for Labor (4)	% Labor of Material (5)	Extension (2) x (5) (6)	Labor Index as computed from Sloan's Mat. Ratio (7)	Labor Index as computed from Sloan's Labor Ratio (8)
1911	138.55	100.00	39.13	60.87	155.6	155.60	100.00	100.00
12	131.56	103.02	38.00	62.00	163.2	168.13	108.05	108.09
13	126.85	105.16	37.23	62.77	168.6	177.30	113.95	114.00
14	161.67	91.16	33.13	66.87	201.8	183.96	118.23	118.30
15	178.81	85.56	31.12	68.88	221.3	189.34	121.68	121.70
16	122.45	107.24	33.19	66.81	201.3	215.87	138.73	138.80
17	80.51	132.15	35.42	64.58	182.3	240.91	154.83	154.89
18	54.81	154.09	30.78	69.22	224.9	346.55	222.72	222.72
19	17.70	202.68	33.72	66.28	196.6	398.47	256.09	256.11
1920	**11.78***	270.40	37.72	62.28	165.1	446.43	286.91	287.00
21	**10.02***	**265.11**	**32.28**	**67.72**	209.8	556.20	357.46	357.98
22	12.78	211.52	30.71	69.29	225.6	477.19	306.68	306.83
23	8.08	220.72	32.92	67.08	203.8	449.83	289.09	289.12
6-30-23	..	238.55						321.50

*Black type: Red figures.

EXCHANGE U. G. CABLE TABLE NO. 5

COMPARISON BETWEEN "LABOR INDEXES"

DERIVED FROM SLOAN'S LABOR RATIOS AND SLOAN'S MATERIAL RATIOS

	% Increase of Material (1)	Material Index (2)	Each Year's % for Material (3)	Gross Add. % for Labor (4)	% Labor of Material (5)	Extension (2) x (5) (6)	Labor Index as computed from Sloan's Mat. Ratio (7)	Labor Index as computed from Sloan's Labor Ratio (8)
1911	58.06	100.00	77.9	22.1	28.4	28.40	100.00	100.00
12	41.23	111.92	77.9	22.1	28.4	31.78	111.90	104.47
13	43.32	110.28	75.9	24.1	31.8	35.09	123.56	104.23
14	51.71	104.18	72.8	27.2	37.4	38.96	137.18	108.04
15	38.93	113.77	72.9	27.1	37.2	42.32	149.10	119.63
16	3.85	152.20	76.5	23.5	30.7	46.72	164.51	120.33
17	23.49*	206.59	80.8	19.2	23.8	49.17	173.13	122.75
18	34.37*	240.83	75.2	24.8	33.0	79.47	279.82	153.30
19	12.84*	181.34	73.2	26.8	36.6	66.37	233.70	172.11
1920	16.01*	188.19	60.2	39.8	66.1	124.39	437.99	186.51
21	4.36*	165.26	56.3	43.7	77.6	128.24	451.55	178.08
22	8.86	145.20	61.4	38.6	62.9	91.33	321.58	165.32
23	3.50	152.71	62.6	37.4	59.7	91.17	321.02	162.17
6-30-23	..	158.06						162.28

*Black type: Red figures.

COMPARISON BETWEEN "LABOR INDEXES"

DERIVED FROM SLOAN'S LABOR RATIOS AND SLOAN'S MATERIAL RATIOS

	% Increase of Material (1)	Material Index (2)	Each Year's Gross Add. % for Material (3)	% for Labor (4)	% Labor of Material (5)	Extension (2) x (5) (6)	Labor Index as computed from Sloan's Mat. Ratio (7)	Sloan's Labor Ratio (8)
1911	137.42	100.00	16.0	84.0	525.0	525.00	100.00	100.00
12	119.97	107.93	16.0	84.0	525.0	566.63	107.93	95.88
13	77.37	133.86	2.3	97.7	4247.8	5686.10	1083.07	100.41
14	74.00	136.45	46.8	53.2	113.7	155.14	29.55	103.06
15	59.13	149.20	36.6	63.4	173.2	258.41	49.22	115.53
16	77.19	133.99	52.9	47.1	89.0	119.25	22.71	118.76
17	59.62	148.74	38.5	61.5	159.7	237.54	45.24	121.24
18	26.70	187.39	32.1	67.9	211.5	396.33	75.49	142.82
19	23.23	192.66	69.4	30.6	44.1	84.96	16.18	163.74
1920	6.75	222.41	51.9	48.1	92.7	206.17	39.27	184.05
21	**7.80***	**257.50**	**42.0**	**58.0**	**138.1**	**355.61**	**67.74**	**184.71**
22	8.46	218.90	41.4	58.6	141.5	309.74	59.00	173.15
23	7.14	221.60	57.5	42.5	73.9	163.76	31.19	170.05
6-30-23	..	237.42			73.9	175.45	33.42	170.07

*Black type: Red figures.

City's Exhibits

TOLL AERIAL CABLE TABLE NO. 7

COMPARISON BETWEEN "LABOR INDEXES"

DERIVED FROM SLOAN'S LABOR RATIOS AND SLOAN'S MATERIAL RATIOS

	% Increase of Material (1)	Material Index (2)	Each Year's Gross Add. % for Material (3)	% for Labor (4)	% Labor of Material (5)	Extension (2) x (5) (6)	Labor Index as computed from Sloan's Mat. Ratio (7)	Sloan's Labor Ratio (8)
1911	52.47	100.00	56.9	43.1	75.7	75.70	100.00	100.00
12	39.58	109.23	56.9	42.1	75.7	82.69	109.23	103.01
13	46.20	104.29	53.6	46.4	86.6	90.32	119.31	103.09
14	51.97	100.33	50.8	49.2	96.8	97.12	128.30	106.55
15	28.69	118.48	44.8	55.2	123.2	145.97	192.83	118.45
16	.86*	153.79	54.5	45.5	83.5	128.41	169.63	120.04
17	16.15*	181.84	46.0	54.0	117.4	213.48	282.01	122.44
18	36.71*	240.91	...	...	..	..	..	150.08
19	9.59*	168.64	100.0	...	0.0	..	..	169.53
1920	11.49*	172.26	30.7	69.3	225.7	388.79	513.59	186.26
21	12.68	135.31	17.3	82.7	478.0	646.78	854.40	180.82
22	20.31	126.73	53.0	47.0	88.7	112.41	148.49	166.37
23	..	152.47	57.8	42.2	73.0	111.30	147.03	165.31
6-30-23	..	152.47	..	..	73.0	111.30	147.03	165.34

*Black type: Red figures.

COMPARISON BETWEEN "LABOR INDEXES"

DERIVED FROM SLOAN'S LABOR RATIOS AND SLOAN'S MATERIAL RATIOS

	% Increase of Material (1)	Material Index (2)	Each Year's % for Material (3)	Gross Add. % for Labor (4)	% Labor of Material (5)	Extension (2) x (5) (6)	Labor Index as computed from Sloan's Mat. Ratio (7)	Labor Index as computed from Sloan's Labor Ratio (8)
1911	18.25	100.00	7.2	92.8	1288.9	1288.90	100.00	100.00
12	5.51	112.07	7.2	92.8	1288.9	1444.47	112.07	99.88
13	6.63	110.99	39.4	60.6	153.8	170.56	13.23	100.41
14	15.28	102.58	72.7	27.3	37.6	38.57	2.99	103.06
15	19.34	99.09	60.4	39.6	65.6	65.00	5.04	115.53
16	**39.90***	196.76	77.7	22.3	28.7	56.47	4.38	118.76
17	**50.24***	237.64	50.3	49.2	96.8	230.04	17.85	121.24
18	**38.51***	192.31	47.5	52.5	110.5	212.50	16.49	142.82
19	**39.28***	194.75	74.7	25.3	33.9	66.02	5.12	163.74
1920	**36.66***	186.69	55.2	44.8	81.2	151.59	11.76	184.05
21	**23.87***	155.33	73.2	26.8	36.6	56.85	4.41	184.71
22	8.00	109.49	73.5	26.5	36.0	39.42	3.06	173.15
23	4.71	112.93	70.3	29.7	42.2	47.66	3.70	170.05
6-30-23	..	118.25	..	..	42.2	49.90	3.87	170.07

*Black type: Red figures.

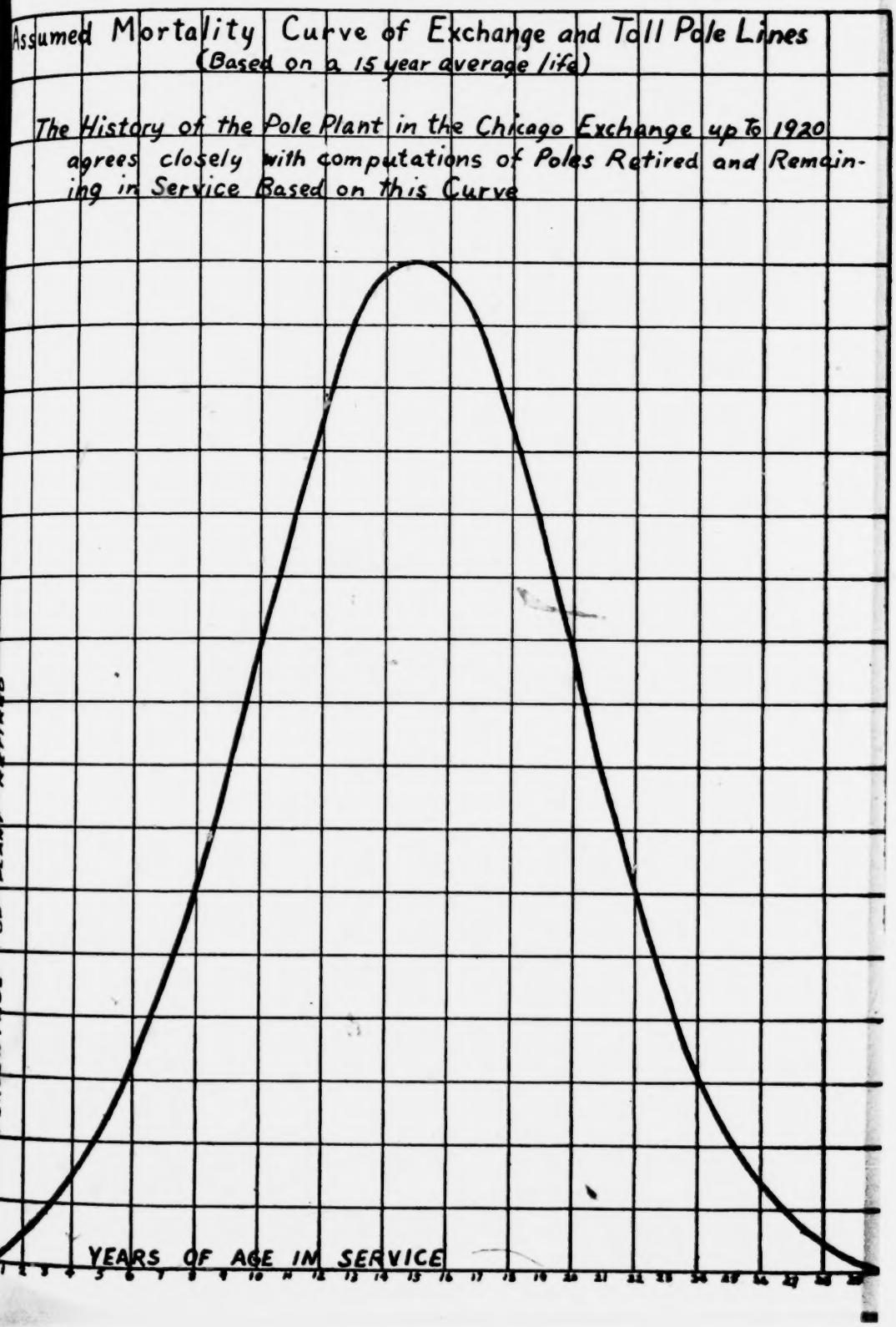
TOLL U. G. CABLE TABLE NO. 9

COMPARISON BETWEEN "LABOR INDEXES"

DERIVED FROM SLOAN'S LABOR RATIOS AND SLOAN'S MATERIAL RATIOS

	% Increase of Material (1)	Material Index (2)	Each Year's Gross Add. % for Material (3)	% for Labor (4)	% Labor of Material (5)	Extension (2) x (5) (6)	Labor Index as computed from Sloan's Mat. Ratio (7)	Sloan's Labor Ratio (8)
1911	63.99	93.55	..	100.0	..	..	..	95.79
12	49.18	102.84	..	100.0	..	..	..	100.25
13	53.41	100.00	84.5	15.5	18.3	18.30	100.00	100.00
14	55.42	98.71	89.1	10.9	12.2	12.04	65.79	103.70
15	44.47	106.19	78.4	21.6	27.6	29.31	160.16	114.78
16	7.10	143.24	79.7	20.3	25.5	36.53	199.62	115.37
17	**21.36***	195.08	91.3	8.7	9.5	18.53	101.26	117.69
18	**32.19***	226.24	87.4	12.6	14.4	32.58	178.03	147.27
19	**8.17***	167.06	87.4	12.6	14.4	24.06	131.48	165.20
1920	**10.59***	171.58	69.1	30.9	44.7	76.70	419.12	178.85
21	**3.62***	159.17	63.8	36.2	56.7	90.25	493.17	170.46
22	8.22	141.76	14.3	85.7	599.3	849.57	4642.46	157.76
23	3.27	148.55	66.1	33.9	51.3	76.21	416.45	155.19
6-30-23	..	153.41			51.3	78.70	430.05	155.28

*Black type: Red figures.


Assumed Mortality Curve of Exchange and Toll Pole Lines
(Based on a 15 year average life)
The History of the Pole Plant in the Chicago Exchange up to 1920 agrees closely with computations of Poles Retired and Remaining in Service Based on this Curve
YEARS OF AGE IN SERVICE

CITY'S EXHIBIT 97.

ILLINOIS BELL TELEPHONE COMPANY—CHICAGO DIVISION

COMPUTATION OF DEPRECIATION (ACCOUNT 608) RECORDED IN EXCESS OF PROVISIONS OF ORDER OF PUBLIC UTILITIES COMMISSION IN CASE NO. 9291, EFFECTIVE IN RESPECT TO DEPRECIATION AS OF JULY 31, 1919

	Five Months ended Dec. 31, 1919	Year 1920	Year 1921	Year 1922	Year 1923	Year 1924	Year 1925
Aver. Monthly Book Bal. in Fixed Capital	$65,599,425	$69,386,301	$75,035,224	$81,226,911	$93,561,884	$105,242,532	$117,625,091
Deduct—Book Bal. in Fixed Capital as of July 31, 1919	64,834,601	64,834,601	64,834,601	64,834,601	64,834,601	64,834,601	64,834,601
Aver. Monthly Net Add	764,824	4,551,700	10,200,623	16,392,310	28,727,283	40,407,931	52,790,490
Allowance for Depr. provided by order of Public Util. Comm. 4% on Net Additions after July 31, 1919	12,747	182,068	408,025	655,692	1,149,091	1,616,317	2,111,620
Allowance for Plant as of July 31, 1919	833,333	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
Total	846,080	2,182,068	2,408,025	2,655,692	3,149,091	3,616,317	4,111,620
Depr. Recorded by Company	1,347,702	3,421,535	3,369,849	3,739,870	4,480,954	4,709,950	5,385,712
Excess of Recorded Depr.	$ 501,622	$ 1,239,467	$ 961,824	$ 1,084,178	$ 1,331,863	$ 1,093,633	$ 1,274,092

CITY'S EXHIBIT 98.

COMPARISON OF LABOR HOUR PERFORMANCE UNDER SPECIFIC AND ROUTINE ESTIMATES

NEW YORK TELEPHONE COMPANY, NEW JERSEY DIVISION

EXCHANGE AERIAL CABLE

ALL SPECIFIC AND ROUTINE ESTIMATES

Item	Quantities of Material	Appraisal Labor Hour Rate	Computed Labor Hours	Actual Labor Hour Rate
Cable				
51 x 19 Paper	83,369	.1104	9,204	.1375
101	34,029	.1314	4,471	.1637
152	24,216	.1526	3,695	.1900
202	24,675	.1724	4,254	.2149
303	13,467	.2129	2,867	.2653
51 x 22 Paper	72,581	.1089	7,904	.1357
101	31,487	.1260	3,967	.1568
202	14,908	.1616	2,409	.2010
303	19,033	.1964	3,738	.2446
404	14,987	.2312	3,465	.2881
51 x 24 Paper	25,343	.1089	2,760	.1357
101	14,451	.1260	1,821	.1570
202	9,991	.1612	1,611	.2008
Terminals				
No. 14—11 pr.	856	12.39	10,606	15.44
16 pr.	2,592.5	12.83	33,262	15.98
26 pr.	444.5	13.90	6,178	17.32
Other Items			10,694	
Total Computed Labor Hours			112,906	
Total Actual Labor Hours			140,663	
Percent Actual to Computed			124.58%	

City's Exhibit 99.

COMPARISON OF LABOR HOUR PERFORMANCE UNDER SPECIFIC AND ROUTINE ESTIMATES

NEW YORK TELEPHONE COMPANY, NEW JERSEY DIVISION
EXCHANGE AERIAL CABLE

ALL SPECIFIC ESTIMATES

Item	Quantities of Material	Appraisal Labor Hour Rate	Computed Labor Hours	Actual Labor Hour Rate
Cable				
51 x 19 Paper	67,302	.1104	7,430	.1055
101	21,887	.1314	2,876	.1256
152	21,809	.1526	3,328	.1458
202	23,970	.1724	4,132	.1647
303	13,452	.2129	2,864	.2034
51 x 22 Paper	52,638	.1089	5,732	.1041
101	25,119	.1260	3,165	.1204
202	12,927	.1616	2,089	.1544
303	16,703	.1964	3,280	.1877
404	14,425	.2312	3,335	.2209
51 x 24 Paper	9,752	.1089	1,062	.1041
101	4,251	.1260	536	.1204
202	3,102	.1612	500	.1540
Terminals				
No. 14—11 pr.	548	12.39	6,790	11.84
16 pr.	1,549	12.83	19,874	12.26
26 pr.	148	13.90	2,057	13.28
Other Items			6,798	
Total Computed Labor Hours			75,848	
Total Actual Labor Hours			72,475	
Percent Actual to Computed			95.55%	

City's Exhibit 100.

COMPARISON OF LABOR HOUR PERFORMANCE UNDER SPECIFIC AND ROUTINE ESTIMATES

NEW YORK TELEPHONE COMPANY, NEW JERSEY DIVISION
EXCHANGE AERIAL CABLE

ALL ROUTINE ESTIMATES

Item	Quantities of Material	Appraisal Labor Hour Rate	Computed Labor Hours	Actual Labor Hour Rate
Cable				
51 x 19 Paper	16,067	.1104	1,774	.2003
101	12,142	.1314	1,595	.2384
152	2,407	.1526	367	.2769
202	705	.1724	122	.3128
303	15	.2129	3	.3863
51 x 22 Paper	19,943	.1089	2,172	.1976
101	6,368	.1260	802	.2286
202	1,981	.1616	320	.2932
303	2,330	.1964	458	.3564
404	562	.2312	130	.4195
51 x 24 Paper	15,591	.1089	1,698	.1976
101	10,200	.1260	1,285	.2286
202	6,889	.1612	1,111	.2925
Terminals				
No. 14—11 pr.	308	12.39	3,816	22.48
16 pr.	1,043.5	12.83	13,388	23.28
26 pr.	296.5	13.90	4,121	25.22
Other Items			3,896	
Total Computed Labor Hours			37,058	
Total Actual Labor Hours			68,188	
Percent Actual to Computed			181.45%	

City's Exhibit 101.

COMPARISON OF LABOR HOUR PERFORMANCE UNDER SPECIFIC AND ROUTINE ESTIMATES

NEW YORK TELEPHONE COMPANY, NEW JERSEY DIVISION

EXCHANGE UNDERGROUND CABLE

ALL SPECIFIC AND ROUTINE ESTIMATES

Item	Quantities of Material	Appraisal Labor Hour Rate	Computed Labor Hours	Actual Labor Hour Rate
Cable				
303 x 19 Paper	17,514	.3187	5,582	.3448
455	62,308	.3430	21,372	.3711
303 x 22 Paper	11,161	.3256	3,634	.3523
404	11,774	.3620	4,274	.3917
606	14,376	.4284	6,158	.4635
909	101,812	.5355	54,520	.5794
303 x 24 Paper	7,664	.3256	2,495	.3523
404	4,066	.3620	1,472	.3917
606	2,376	.4284	1,018	.4635
909	4,011	.5355	2,148	.5794
1212	28,806	.6662	19,191	.7208
Composite				
288 pair) 19 qd. 16 ga.) 24 " 19 ") 202 x 19)	9,478	.2497	2,367	.2702
Other Items			5,452	
Total Computed Hours			129,683	
Total Actual Hours			140,321	
Percent Actual to Computed		48.806	108.20%	

City's Exhibit 102.

COMPARISON OF LABOR HOUR PERFORMANCE UNDER SPECIFIC AND ROUTINE ESTIMATES

NEW YORK TELEPHONE COMPANY, NEW JERSEY DIVISION
EXCHANGE UNDERGROUND CABLE

ALL SPECIFIC ESTIMATES

Item	Quantities of Material	Appraisal Labor Hour Rate	Computed Labor Hours	Actual Labor Hour Rate
Cable				
303 x 19 Paper	13,546	.3187	4,317	.2909
455	61,358	.3430	21,046	.3131
303 x 22 Paper	9,560	.3256	3,113	.2972
404	9,366	.3620	3,400	.3305
606	14,158	.4284	6,065	.3911
909	99,530	.5355	53,298	.4889
303 x 24 Paper	4,913	.3256	1,600	.2972
404	556	.3620	201	.3305
606	2,321	.4284	994	.3911
909	4,011	.5355	2,148	.4889
1212	27,791	.6662	18,514	.6082
Composite				
288 pair 19 qd. 16 ga. 24 qd. 19 ga. 202 x 19	9,478	.2497	2,367	.2280
Other Items			2,972	
Total Computed Labor Hours			120,035	
Total Actual Labor Hours			109,576	
Percent Actual to Composite			91.29%	

City's Exhibit 103.

COMPARISON OF LABOR HOUR PERFORMANCE UNDER SPECIFIC AND ROUTINE ESTIMATES

NEW YORK TELEPHONE COMPANY, NEW JERSEY DIVISION

EXCHANGE UNDERGROUND CABLE

ALL ROUTINE ESTIMATES

Item	Quantities of Material	Appraisal Labor Hour Rate	Computed Labor Hours	Actual Labor Hour Rate
Cable				
303 x 19 Paper.....	3,968	.3187	1,265	1.0156
455	950	.3430	326	1.0930
303 x 22 Paper.....	1,601	.3256	521	1.0376
404	2,408	.3620	874	1.1536
606	218	.4284	93	1.3632
909	2,282	.5355	1,222	1.7065
303 x 24 Paper.....	2,751	.3256	895	1.0376
404	3,510	.3620	1,271	1.1536
606	55	.4284	24	1.3652
909	....	....	....	.....
1212	1,015	.6662	677	2.1230
Other Items			2,480	
Total Computed Labor Hours.....			9,648	
Total Actual Labor Hours.....			30,745	
Percent Actual to Computed.....			318.67%	

City Exhibit 104

COMPARATIVE PRICE LEVELS

1923-4-5

	1923	1924	1925
GENERAL INDEXES (U. S. Dept. of Labor):			
Metals and Metal Products	100.0	97.3	94.4
Building Materials	100.0	94.1	93.6
Pay Roll Totals (Manufacturing)	100.0	90.7	93.7
TELEPHONE MATERIALS:			
N. C. Poles, F. O. B. Gemmel (Jobbers), 25'-5"	100.0	75.0	70.0
" 35'-6"	100.0	83.3	67.7
" 35'-7"	100.0	90.3	64.5
" 40'-7"	100.0	82.7	66.7
Wire (U. S. Dept. of Labor), Copper	100.0	90.3	95.4
" , Galv.	100.0	97.3	86.6
Composite of #92 Jack Switchboard	100.0	93.4	
" " #19 " "	100.0	96.8	

City Exhibit 106.

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(*a*) In the following tabulation are shown the average prices of copper and lead during each of the years from 1911 to 1923 inclusive as these prices have been published by the United States Department of Labor. To facilitate the comparison, in the last two columns this affiant has reduced the annual prices to index numbers, using 1923 as a base. From these index numbers this affiant concludes that the price fluctuations of these two metals were widely dissimilar.

METAL INDEX ON 1923 BASE

(Prices from U. S. Dept. of Labor)

Year	Price		Index	
	Copper	Lead	Copper	Lead
1923	.145	.074	100.0	100.0
1922	.134	.058	92.4	78.4
1921	.126	.046	86.9	62.2
1920	.180	.081	124.1	109.5
1919	.191	.058	131.7	78.4
1918	.247	.074	170.3	100.0
1917	.294	.091	202.8	123.0
1916	.275	.068	189.7	91.9
1915	.173	.046	119.3	62.2
1914	.134	.039	92.4	52.7
1913	.157	.044	108.3	59.5
1912	.164	.044	113.1	59.5
1911	.125	.045	86.2	60.8

(*b*) In the following tabulation this affiant has computed

the relative proportions of copper and lead in seven typical sizes of 22 gauge cable. The copper weights were computed from the standard wire tables and the lead weights from the dimensions shown in the catalogue issued to the trade by the Graybar Electric Company. In the last two columns of this tabulation this affiant shows that the proportion of copper increases with the size of the cable, and that in the case of 909 pair cable it is more than twice as great as in the case of 51 pair.

WEIGHTS AND PROPORTIONS OF BASE METALS

In Typical Sizes of 22 Gauge (B. S. A.) Cable

No. of Pairs	Weight of Metal			Per cent of Total	
	Copper	Lead	Total	Copper	Lead
51	.198	.714	.912	21.71	78.29
101	.393	1.126	1.519	25.87	74.13
202	.786	1.637	2.423	32.14	67.56
303	1.179	2.212	3.391	34.77	65.23
404	1.572	2.476	4.048	38.83	61.17
606	2.357	3.321	5.678	41.51	58.49
909	3.536	4.438	7.974	44.34	55.66

City's Exhibit 107.

EXHIBIT A

BASE METAL PRICES AND COMPOSITE METAL PRICES IN TYPICAL SIZES OF 22 GAUGE (B.S.A.) CABLE

	Metal Prices per lb.		51 Pair Metal Prices Per ft. of Cable			101 Pair Metal Prices Per ft. of Cable			202 Pair Metal Prices Per ft. of Cable			303 Pair Metal Prices Per ft. of Cable			404 Pair Metal Prices Per ft. of Cable			6 Met Per
	Copp.	Lead	Copp.	Lead	Total	Copp.	Lead	Total	Copp.	Lead	Total	Copp.	Lead	Total	Copp.	Lead	Total	Copp.
1923	.145	.074	.0287	.0528	.0815	.0570	.0833	.1403	.1140	.1211	.2351	.1710	.1637	.3347	.2279	.1832	.4611	.3418
1922	.134	.058	.0265	.0414	.0679	.0527	.0653	.1180	.1053	.0949	.2002	.1580	.1283	.2863	.2106	.1436	.3542	.3158
1921	.126	.046	.0249	.0328	.0577	.0495	.0518	.1013	.0990	.0753	.1743	.1486	.1018	.2504	.1981	.1139	.3120	.2970
1920	.180	.081	.0356	.0578	.0934	.0707	.0912	.1619	.1415	.1326	.2741	.2122	.1792	.3914	.2830	.2006	.4836	.4243
1919	.191	.058	.0378	.0414	.0792	.0751	.0653	.1404	.1501	.0949	.2450	.2252	.1283	.3535	.3003	.1436	.4439	.4502
1918	.247	.074	.0489	.0528	.1017	.0971	.0833	.1804	.1941	.1211	.3152	.2912	.1637	.4549	.3883	.1832	.5715	.5822
1917	.294	.091	.0582	.0650	.1232	.1155	.1025	.2180	.2311	.1490	.3801	.3466	.2013	.5479	.4622	.2253	.6875	.6930
1916	.275	.068	.0545	.0486	.1031	.1081	.0766	.1847	.2161	.1113	.3274	.3242	.1504	.4746	.4323	.1684	.6007	.6482
1915	.173	.046	.0343	.0328	.0671	.0680	.0518	.1198	.1360	.0753	.2113	.2040	.1018	.3058	.2720	.1139	.3859	.4078
1914	.134	.039	.0265	.0278	.0543	.0527	.0439	.0966	.1053	.0638	.1691	.1580	.0863	.2443	.2106	.0966	.3072	.3158
1913	.157	.044	.0311	.0314	.0625	.0617	.0495	.1112	.1234	.0720	.1954	.1851	.0973	.2824	.2468	.1089	.3557	.3700
1912	.164	.044	.0325	.0314	.0639	.0645	.0495	.1140	.1289	.0720	.2009	.1934	.0973	.2907	.2578	.1089	.3667	.3865
1911	.125	.045	.0247	.0321	.0568	.0491	.0507	.0998	.0983	.0737	.1720	.1474	.0995	.2469	.1965	.1114	.3079	.2946
Weight of Metal per ft. of Cable.....			.198	.714	.912	.393	1.126	1.519	.786	1.637	2.423	1.179	2.212	3.391	1.572	2.476	4.048	2.357
								PRICE LEVEL EACH YEAR AS PERCENTAGE OF 1923 LEVEL										
1923	100	100	....	....	100	....	....	100	....	....	100	....	....	100	....	....	100	....
1922	92	78	....	....	83	....	....	84	....	....	85	....	....	86	....	....	86	....
1921	87	62	....	....	71	....	....	72	....	....	74	....	....	75	....	....	76	....
1920	124	109	....	....	115	....	....	115	....	....	116	....	....	117	....	....	118	....
1919	132	78	....	....	97	....	....	100	....	....	104	....	....	106	....	....	108	....
1918	170	100	....	....	125	....	....	129	....	....	134	....	....	136	....	....	139	....
1917	203	123	....	....	151	....	....	155	....	....	162	....	....	164	....	....	167	....
1916	190	92	....	....	127	....	....	132	....	....	139	....	....	142	....	....	146	....
1915	119	62	....	....	82	....	....	85	....	....	90	....	....	91	....	....	93	....
1914	92	53	....	....	67	....	....	69	....	....	72	....	....	73	....	....	75	....
1913	108	59	....	....	77	....	....	79	....	....	83	....	....	84	....	....	86	....
1912	113	59	....	....	78	....	....	81	....	....	85	....	....	87	....	....	89	....
1911	86	61	....	....	70	....	....	71	....	....	73	....	....	74	....	....	75	....

City's Exhibit 107.

EXHIBIT A

BASE METAL PRICES AND COMPOSITE METAL PRICES IN TYPICAL SIZES OF 22 GAUGE (B.S.A.) CABLE

51 Pair tal Prices ft. of Cable		101 Pair Metal Prices Per ft. of Cable			202 Pair Metal Prices Per ft. of Cable			303 Pair Metal Prices Per ft. of Cable			404 Pair Metal Prices Per ft. of Cable			606 Pair Metal Prices Per ft. of Cable			909 Pair Metal Prices Per ft. of Cable		
Lead	Total	Copp.	Lead	Total	Copp.	Lead	Total	Copp.	Lead	Total	Copp.	Lead	Total	Copp.	Lead	Total	Copp.	Lead	Total
.0528	.0815	.0570	.0833	.1403	.1140	.1211	.2351	.1710	.1637	.3347	.2279	.1832	.4611	.3418	.2458	.5876	.5127	.3284	.8411
.0414	.0679	.0527	.0653	.1180	.1053	.0949	.2002	.1580	.1283	.2863	.2106	.1436	.3542	.3158	.1926	.5084	.4738	.2574	.7312
.0328	.0577	.0495	.0518	.1013	.0990	.0753	.1743	.1486	.1018	.2504	.1981	.1139	.3120	.2970	.1528	.4498	.4455	.2041	.6496
.0578	.0934	.0707	.0912	.1619	.1415	.1326	.2741	.2122	.1792	.3914	.2830	.2006	.4836	.4243	.2690	.6933	.6365	.3595	.9960
.0414	.0792	.0751	.0653	.1404	.1501	.0949	.2450	.2252	.1283	.3535	.3003	.1436	.4439	.4502	.1926	.6428	.6754	.2574	.9328
.0528	.1017	.0971	.0833	.1804	.1941	.1211	.3152	.2912	.1637	.4549	.3883	.1832	.5715	.5822	.2458	.8280	.8734	.3284	1.2018
.0650	.1232	.1155	.1025	.2180	.2311	.1490	.3801	.3466	.2013	.5479	.4622	.2253	.6875	.6930	.3022	.9952	1.0396	.4039	1.4435
.0486	.1031	.1081	.0766	.1847	.2161	.1113	.3274	.3242	.1504	.4746	.4323	.1684	.6007	.6482	.2258	.8740	.9724	.3018	1.2742
.0328	.0671	.0680	.0518	.1198	.1360	.0753	.2113	.2040	.1018	.3058	.2720	.1139	.3859	.4078	.1528	.5606	.6117	.2041	.8158
.0278	.0543	.0527	.0439	.0966	.1053	.0638	.1691	.1580	.0863	.2443	.2106	.0966	.3072	.3158	.1295	.4453	.4738	.1731	.6469
.0314	.0625	.0617	.0495	.1112	.1234	.0720	.1954	.1851	.0973	.2824	.2468	.1089	.3557	.3700	.1461	.5161	.5552	.1953	.7505
.0314	.0639	.0645	.0495	.1140	.1289	.0720	.2009	.1934	.0973	.2907	.2578	.1089	.3667	.3865	.1461	.5326	.5799	.1953	.7752
.0321	.0568	.0491	.0507	.0998	.0983	.0737	.1720	.1474	.0995	.2469	.1965	.1114	.3079	.2946	.1494	.4440	.4420	.1997	.6417
.714	.912	.393	1.126	1.519	.786	1.637	2.423	1.179	2.212	3.391	1.572	2.476	4.048	2.357	3.321	5.678	3.536	4.438	7.974
					PRICE LEVEL EACH YEAR AS PERCENTAGE OF 1923 LEVEL														
....	100	....	....	100	....	....	100	....	....	100	....	....	100	....	....	100	....	....	100
....	83	....	....	84	....	....	85	....	....	86	....	....	86	....	....	87	....	....	87
....	71	....	....	72	....	....	74	....	....	75	....	....	76	....	....	77	....	....	77
....	115	....	....	115	....	....	116	....	....	117	....	....	118	....	....	118	....	....	118
....	97	....	....	100	....	....	104	....	....	106	....	....	108	....	....	109	....	....	111
....	125	....	....	129	....	....	134	....	....	136	....	....	139	....	....	141	....	....	143
....	151	....	....	155	....	....	162	....	....	164	....	....	167	....	....	169	....	....	172
....	127	....	....	132	....	....	139	....	....	142	....	....	146	....	....	149	....	....	151
....	82	....	....	85	....	....	90	....	....	91	....	....	93	....	....	95	....	....	97
....	67	....	....	69	....	....	72	....	....	73	....	....	75	....	....	76	....	....	77
....	77	....	....	79	....	....	83	....	....	84	....	....	86	....	....	88	....	....	89
....	78	....	....	81	....	....	85	....	....	87	....	....	89	....	....	91	....	....	92
....	70	....	....	71	....	....	73	....	....	74	....	....	75	....	....	76	....	....	76

City Exhibit 108.

WORKING CAPITAL OF ILLINOIS BELL TELEPHONE COMPANY

ASSETS	December 31, 1922	December 31, 1923
Cash and Deposits	$1,509,975.00	$1,987,693.43
Securities	4,356.94	4,229.41
Bills Receivable	32,312.79	52,847.88
Accounts Receivable	5,157,659.44	5,603,389.62
Material and Supplies	793,603.42	933,320.24
Accrued Income Not Due	4,681.66	146,182.50
Sinking Fund Assets		77,512.03
Prepayments	371,470.46	524,723.59
Other Deferred Debits	86,790.39	142,237.92
Total Current Assets	$7,960,850.10	$9,472,136.62

	December 31, 1924	December 31, 1925
Cash and Deposits	$1,257,964.07	$1,677,589.19
Securities	13,362.18	35,904.47
Bills Receivable	4,127.04	27,826.90
Accounts Receivable	8,223,106.39	5,819,050.33
Material and Supplies	833,704.03	943,021.52
Accrued Income Not Due	8,132.89	10,277.25
Sinking Fund Assets	85,212.55	250,688.19
Prepayments	572,371.85	605,233.47
Other Deferred Debits	339,060.40	261,957.45
Total Current Assets	$11,336,771.40	$9,631,548.77

LIABILITIES	December 31, 1922	December 31, 1923
Accounts Payable	$2,754,294.91	$3,655,063.60
Accrued Liabilities Not Due	4,114,610.48	4,670,118.29
Deferred Credits	1,879,221.03	1,463,919.93
Total Current Liabilities	$8,748,126.42	$9,789,101.82

	December 31, 1924	December 31, 1925
Accounts Payable	$4,242,307.47	$3,609,511.19
Accrued Liabilities Not Due	4,833,478.20	5,555,081.35
Deferred Credits	2,058,397.31	2,932,422.21
Total Current Liabilities	$11,134,182.98	$12,097,014.75
Working Capital December 31, 1924	202,588.42	
Deficit in Working Capital December 31, 1922		$ 787,276.32
" " " " " " 1923		316,965.20
" " " " " " 1925		2,465,465.98

CITY EXHIBIT 109.

AFFIDAVIT OF HARRY G. WESTPHALN

of Chicago.

No. 2.

State of Illinois) }
County of Cook) } ss.

HARRY G. WESTPHALN, of Chicago, Illinois, being duly sworn, on oath deposes and says that he is a certified public accountant, and for the past ten years has been expert accountant in the Department of Finance of the City of Chicago and has been in the employ of said department in the above and other capacities since February, 1914. That it has been part of his duty to examine, investigate and check the reports, books and accounts of different utility companies operating in the City of Chicago, including the Illinois Bell Telephone Company, and he is familiar with the accounting methods followed by them.

That he has made an examination of the financial reports of the Illinois Bell Telephone Company, made monthly to the City Comptroller and annually to the Interstate Commerce Commission and the Illinois Commerce Commission, and has prepared a statement which is attached hereto, marked "Exhibit B," which shows:

That the cost of property as shown by the books is made up substantially of additions since 1913. Over 70 per cent of the fixed capital shown on the books in 1925 represented additions since January 1, 1914, a total of $88,679,932.00, at the higher level of prices prevailing since 1914.

That the book cost of retirements from 1914 to 1925, both inclusive, amounting to $35,793,703.00, represented 97 per cent of the total balance in the fixed capital account on January 1, 1914.

That the gross additions added during the period 1914 to 1925, both inclusive, amounted to $125,473,635.00, which is 99 per cent of the fixed capital account Dec. 31, 1925.

That the net additions in the years 1913 to 1925, both inclusive, amounting to $88,679,932.00, constituted more than 2.3 times the balance of the capital account on January 1, 1914.

That the fixed capital employed by the plaintiff as shown

on the books, amounting to $126,493,467.00 Dec. 31, 1925, is over 3 1/3 times the amount shown on the books prior to 1914.

That if all the property in existence January 1, 1914, had survived until 1925, such property would be only 28.8 per cent of the total property on hand in 1925.

(Signed) HARRY G. WESTPHALN.

Subscribed and sworn to before me this 13th day of April, A. D. 1929.

(Signed) META SCHMIDT, (SEAL)
Notary Public.

ILLINOIS BELL TELEPHONE COMPANY

Fixed Capital Account, Chicago Division,
Not Including Work in Progress

Year	Gross Additions & Transfers	Retirements	Net Additions	Fixed Capital Dec. 31
1913				**$37,813,741**
1914	$ 8,432,100	$ 2,548,883	$ 5,883,217	43,696,958
1915	6,876,493	2,828,414	4,048,079	47,745,036
1916	6,915,574	2,454,093	4,461,481	52,206,517
1917	9,225,470	3,186,234	6,039,236	58,245,753
1918	6,657,120	1,809,452	4,847,668	63,093,421
1919	5,705,534	1,808,039	3,897,495	66,990,915
1920	7,299,791	1,838,779	5,461,012	72,451,927
1921	7,663,810	2,720,790	4,943,020	77,394,946
Total	$ 58,775,892	$19,194,684	$39,581,208	
1922	$ 11,076,563	$ 2,783,693	$ 8,292,870	$85,687,816
1923	18,435,639	3,978,036	14,457,603	100,145,419
Total 1913-23...	$ 88,288,094	$25,956,413	$62,331,681	
1924	$ 15,743,357	$ 4,901,149	$10,842,208	$110,987,270
1925	21,442,182	5,936,341	15,505,841	126,493,467
Total 1913-25...	$125,473,633	$36,793,903	$88,679,730	

City's Exhibit 110.

COMPARISON OF BOND YIELDS

AMERICAN TELEPHONE & TELEGRAPH CO., ILLINOIS BELL TEL. CO. AND COMMONWEALTH EDISON CO.

		A. T. & T. Co. S. F. Deb. 5½s 1943		I. B. T. Co. 1st and Ref. 5s 1956		Com. Ed. Co. 1st Col. 5s 1953	
1923	High	98¾	5.6%	95⅝	5.30%	92½	5.5
	Low	98	5.68	93⅛	5.40	92	5.5
1924	High	103¼	5.22	98¼	5.1	99⅛	5.05
	Low	98¼	5.65	93½	5.4	92	5.53
1925	High	105	5.07	101⅞	4.9	100	5
	Low	101	5.41	97	5.2	99⅝	5.02
1926	High	106½	4.93	103¾	4.8	104	4.73
	Low	103	5.22	100¾	4.9	99¾	5.03
1927	High	109½	4.65	106	4.6	105	4.67
	Low	105¾	4.97	102¾	4.8	102⅝	4.83

A. T. & T. Co. S. F. Deb. 5½s Authorized $100,000,000.
Dated Nov. 1, 1923, Due Nov. 1, 1943.
Offered at 98½ in Nov. 1923.
Illinois Bell Tel. Co. 1st and Ref. 5s 1956—Authorized $50,000,000.
Dated June 1, 1923, Due June 1, 1956.
Offered at 95¼ in June, 1923.
Com. Edison Co. 1st Col. 5s 1953 Open Mtge.
This issue $15,000,000—Dated July 1, 1923, Due July 1, 1953.
Offered at 92½ in December, 1923.

City's Exhibit 111.

COMPARISON OF STOCK YIELDS

AMERICAN TELEPHONE & TELEGRAPH CO. AND COMMONWEALTH EDISON CO.

		A. T. & T. Cap. Stock	Yield	Com. Ed. Co. Cap. Stock	Yield
1923	High	128¾	6.99%	131	6.10%
	Low	119⅛	7.56%	126	6.35%
1924	High	134¾	6.86%	137½	5.82%
	Low	121⅛	7.43%	126¼	6.34%
1925	High	145	6.21%	141¾	5.64%
	Low	130⅝	6.89%	130½	6.13%
1926	High	151	5.96%	144⅜	5.53%
	Low	139⅝	6.43%	134	5.97%
1927	High	185½	4.85%	173	4.62%
	Low	149¼	6.03%	138	5.80%

Illinois Bell Telephone Company Stock yields 8% on par. All stock sold by Company at par.

Aggregate amount of stock sold from December 31, 1922 to December 31, 1927, $50,000,000 of which the American Telephone and Telegraph Company purchased over 98¾ per cent.

City's Exhibit 112.

ILLINOIS BELL TELEPHONE COMPANY—CHICAGO EXCHANGE

Yield Computed on Mr. Crunden's Basis

June 30, 1923

Sloan's Cost to Reproduce Structural Plant		$143,860,969
" " " " General Equipment		1,387,375
" " " " Plant and Equipment		$145,248,344
Less Rhodes' Depreciation:		
10% on Plant except land	14,242,745	
20% on General Equipment	277,475	
Rhodes' Total Depreciation		14,520,220
Cost to Reproduce less Depreciation		130,728,124
Going Value (Sloan)		21,750,000
Working Capital (Cleveland)		3,000,000
Materials and Supplies (Cleveland)		233,000
Construction Work in Progress		
Rate Base		$155,711,124
8% return on above rate base		12,456,890
Capital Stock issued Total Company		64,044,640
Bonds Outstanding " "		50,310,000
Chicago Exchange Stock 69.1%		44,254,850
" " Bonds 69.1%		34,764,210
The above 8% return will pay:		
5% interest on Bonds		1,738,210
8% Dividends on Stock		3,540,388
and leave Surplus of		7,178,292
		12,456,890
or		
5% Interest on Bonds		1,738,210
24% Dividends on Stock		10,621,164
and leave Surplus of		97,516
		12,456,890
or		
Investment on Mr. Crunden's Basis		$102,550,896
Return asked for		12,456,890
Yield	12.15%	

City's Exhibit 113.

ILLINOIS BELL TELEPHONE COMPANY—CHICAGO EXCHANGE

	Result of Charging Depreciation at rate of 2½%			
	A	B	C	D
Year	Average Depreciable Plant	Charges to Operations at 2½%	Charges to Reserve	Balance in Reserve
1907	.....	.....	.....	$ 1,506,004
1908	$ 20,812,739	$ 520,318	$ 846,899	$ 1,179,423
1909	22,296,198	557,405	784,003	942,825
1910	23,921,780	598,044	434,301	1,116,568
1911	26,639,204	665,980	348,018	1,434,530
1912	30,402,992	760,075	901,692	1,292,913
1913	34,801,126	870,028	1,041,264	1,121,677
1914	40,112,879	1,002,822	1,456,801	667,698
1915	44,854,839	1,121,371	1,599,335	189,734
1916	48,893,720	1,222,343	1,283,615	128,462
1917	54,031,645	1,350,791	1,292,111	187,142
1918	59,406,089	1,485,152	581,557	1,090,737
1919	63,756,169	1,593,904	611,061	2,073,580
1920	68,405,667	1,710,142	546,023	3,237,699
1921	73,592,298	1,839,807	615,297	4,462,209
1922	80,200,436	2,005,011	899,399	5,567,821
1923	91,398,961	2,284,974	1,500,379	6,352,416
1924	103,882,170	2,597,054	2,151,824	6,797,646
1925	117,022,229	2,925,556	1,932,734	7,790,468
		$25,110,777	$18,826,313	

City Exhibit 115.

Illinois Bell Telephone Company.

I hereby certify that the following is a true copy of resolution duly adopted by the board of directors of the Illinois Bell Telephone Company at a regular meeting duly called and held on November 27, 1918, at which meeting a quorum was present.

.....

Secretary.

The chairman referred to the letter dated July 17, 1918, received from the American Telephone and Telegraph Company, restating in summarized form the obligations of that company to this company under the license contract, which letter was presented at a meeting of the executive committee on July 31, 1918, and was spread upon the minutes of that meeting, and said that an agreement in final form had now been prepared, which fully described the contractural relations existing between the companies, which new form required the signatures of the officers of this company. On motion, the directors authorized the officers of the company to execute the new form of agreement.

City's Exhibit 116.

ILLINOIS BELL TELEPHONE COMPANY

CHICAGO EXCHANGE

ANALYSIS OF DIFFERENCE BETWEEN THE AMOUNTS BILLED FOR USE OF PLANT FOR LONG LINES SERVICE AS SHOWN ON PLAINTIFF'S EXHIBIT NO. 15 AND THE ILLINOIS BELL'S PORTION OF CHICAGO GROSS TOLLS AS SHOWN ON CITY EXHIBIT NO. 44

		1922	1923	1924	1925
1)	City Exhibit No. 44—I. B. T. Co.'s proportion of Gross Tolls	$888,603.01	$991,026.83	$1,089,963.73	$1,225,696.36
2)	Plaintiff's Exhibit No. 15—Billing for Plant used for Long Lines service	648,137.19	731,693.20	835,125.84	944,575.35
3)	Difference	$240,465.82	$259,333.63	$254,837.89	$281,121.01
	Detail of Difference				
4)	Amount of Commissions on Originating Messages @ 17c	$336,086.09	$364,428.49	$376,052.92	$416,380.49
5)	Less—Amount of Commissions @ 5c on uncollectible messages included in total of 17c commissions	1,381.90	1,514.85	2,134.85	2,257.95
6)	Net	$334,704.19	$362,913.64	$373,918.07	$414,122.54
7)	Amounts included in Total Plant Billing (line 2) credited to other than Message Tolls Account covering Leased Lines and Telegraph Service	94,238.37	103,580.01	119,080.18	133,001.53
8)	Total Difference	$240,465.82	$259,333.63	$254,837.89	$281,121.01

ILLINOIS BELL TELEPHONE COMPANY

CHICAGO EXCHANGE.

AMOUNT OF BILLING TO THE AMERICAN TELEPHONE AND TELEGRAPH COMPANY FOR OPERATING THE TOLL PROPERTIES DEVOTED TO LONG LINES SERVICE IN CHICAGO—1922 TO 1925.

Year	Amount
1922	$1,094,433.28
1923	1,214,231.59
1924	1,229,125.30
1925	1,206,989.37

The billing to the American Telegraph and Telegraph Company during the years 1922 to 1925, includes the following items incurred in connection with the handling of Long Lines Traffic:

(a) Wages of toll operators;
(b) Operating clerical wages;
(c) Rest and Lunch Room expenses;
(d) Operators training expense;
(e) Direct supervision;
(f) Stationery and other central office supplies;
(g) Power used in transmitting Long Lines messages;
(h) Benefit payments to employees engaged on Long Lines traffic;
(i) Heat, light and janitor service in quarters used for Long Lines purposes;
(j) Other miscellaneous expenses;
(k) 10% administration charge computed on total of above items.

In addition such billing includes the annual charges on building space used for Long Lines purposes in the Main Group Buildings.

CITY'S EXHIBIT 118.

484

(20)

1105 Chapter 326.

COMMONWEALTH OF MASSACHUSETTS.

In the Year One Thousand Eight Hundred and Eighty-Six.

AN ACT

Limiting the American Bell Telephone Company in Holding Stock in Certain Corporations.

Be it enacted by the Senate and House of Representatives in General Court Assembled, and by the authority of the same, as follows:

SECTION 1. Section two of chapter one hundred and seventeen of the acts of the year eighteen hundred and eighty is hereby amended by inserting after the word "others" in the fifth line thereof the words:—*provided*, that said corporation shall not become a stockholder in any other corporation to an amount exceeding thirty per cent. of the capital stock of such other corporation; *provided, also*, that nothing herein contained shall prevent the said corporation from taking and paying for its proportionate share of any future increase in the capital stock of a company in which it is at present a shareholder of record if such increase shall be paid in, in full, in cash.

SECTION 2. Chapter two hundred of the acts of the year eighteen hundred and eighty-three and all acts or parts inconsistent herewith are hereby repealed.

SECTION 3. This act shall take effect upon its passage.

House of Representatives, June 23, 1886. Passed to be enacted.

J. Q. A. BRACKETT,
Speaker.

In Senate, June 24, 1886. Passed to be enacted.

A. E. PILLSBURY,
President.

June 24, 1886. Approved.

GEO. D. ROBINSON.

CITY EXHIBIT 119.

1109 (17) Prior to the year 1899 all of the stock of the American Company had been owned by the American Bell Company, and the American Company had itself owned stock in certain of the so-called subsidiary companies of the Bell system, but had not owned any stock of the Union Company. The American Company was also at that time an operating company conducting a long distance telephone business exclusively with the exception of a single exchange not in the Union Company's territory.

On March 11, 1899, the American Bell Company sold to the American Company for the sum of $46,500,000 certain shares of stock of certain companies operating in the United States and Canada, including 33,316 shares of stock of the Union Company, together with certain bonds belonging to the American Bell Company.

(1) On December 11th, 1899, the American Bell Company and the American Company entered into a contract in words and figures as follows, to wit:

"THE AMERICAN BELL TELEPHONE COMPANY, incorporated under the laws of Massachusetts, and the AMERICAN TELEPHONE AND TELEGRAPH COMPANY, incorporated under the laws of New York, hereby agree as follows:

1. Said The American Bell Telephone Company hereby sells, assigns and transfers to said American Telephone and Telegraph Company, for the consideration hereinafter specified, the following property, namely:

First. All the shares of the capital stock of corporations other than said American Telephone and Telegraph Company which have been acquired by The American Bell Telephone Company since December 31, 1898;

Second. (a) All its patents and patent rights; all its rights to any and all inventions now made or hereafter to be made to which it may be entitled under any contracts or otherwise howsoever;

(b) All its licenses issued to or contracts with other corporations or persons, said American Telephone and Telegraph Company by the execution hereof agreeing to assume and discharge all obligations, duties and covenants therein contained or thereout arising on the part of said The American Bell Telephone Company to be done, kept or performed;

(c) All telephones of every kind now in its possession or in the hands of its lessees and licensees under the terms of the aforesaid contracts;

1110 *Third.* All bills and accounts receivable and all cash on hand:

Fourth. (a) All its real estate, hereby covenanting to make proper conveyance thereof to such persons or corporations as said American Telephone and Telegraph Company may hereafter designate;

(b) All its books of account, papers, contracts, and documents, except those needed to continue its organization;

(c) All its office furniture and fixtures and all claims against any person or corporation, and all other its personal property and assets, excepting the shares of the capital stock of said American Telephone and Telegraph Company now held by or for it, said The American Bell Telephone Company.

2. Said American Telephone and Telegraph Company may use the name of said The American Bell Telephone Company in any suits now pending and in all others which it may see fit to bring for, respecting, to enforce or to protect the rights and interest hereby sold, for causes of action hereafter to arise as well as for those now existing and all such suits shall be under the sole direction and control and carried on at the sole expense of said American Telephone and Telegraph Company, and the recoveries and advantages of such suits now pending or hereafter to be brought shall belong entirely to said company.

3. The legal title to all property hereby sold, except said real estate, shall and does hereby vest in said American Telephone and Telegraph Company and said The American Bell Telephone Company hereby agrees to continue and keep alive its corporate existence and organization so long as said American Telephone and Telegraph Company may reasonably request for the purposes aforesaid, the funds for the reasonable expenses thereof to be furnished by said American Telephone and Telegraph Company from time to time as may be needed, and upon the dissolution of said The American Bell Telephone Company, all its books and records and remaining property, except the shares of the capital stock of said American Telephone and Telegraph Company held by or for it, shall be transferred to said American

Telephone and Telegraph Company, or its appointees or assigns.

4. And said The American Bell Telephone Company further agrees that it will, upon the request of said American Telephone and Telegraph Company, from time to time and at all times, do, make, execute and deliver any and all such other and further acts, deeds and
1111 instruments as may be necessary for the complete and effectual transfer to said American Telephone and Telegraph Company of all and singular the rights and property of every name and nature now owned by or the title or possession of which is in it, said The American Bell Telephone Company, or to which it may be entitled, except said shares of the capital stock of the said American Telephone and Telegraph Company now held by it, or for it, said The American Bell Telephone Company.

5. In consideration of the premises, said American Telephone and Telegraph Company hereby assumes and will pay, first, all the bonds of The American Bell Telephone Company now outstanding; second, all other debts and liabilities and obligations of every kind, known and unknown, due from or for which said The American Bell Telephone Company is in any way bound; and particularly (not hereby intending to limit the generality of the preceding covenants) all claims which may hereafter arise out of or respecting any of the contracts, leases or property hereby conveyed, and also expressly assumes and agrees to perform all the obligations incumbent on said The American Bell Telephone Company by and under a certain contract dated Nov. 10, 1879, made by The National Bell Telephone Company with the Western Union Telegraph Company, said The American Bell Telephone Company having assumed the obligations of said contract incurred therein by said The National Bell Telephone Company, and hereby assumes the control, direction, cost, expenses and defense of all suits now brought or which may hereafter be brought, if any, against said The American Bell Telephone Company for any cause whatsoever and will hold said The American Bell Telephone Company harmless from all recoveries had therein and generally will fully indemnify and save harmless said The American Bell Telephone Company from all claims, demands and expenses whatsoever in the premises.

6. Said two parties for themselves, their respective

successors and assigns, do covenant, each with the other and their respective successors and assigns, that it will and they shall execute all such other writings and do and perform such other acts as may be convenient for the carrying out of these presents and as may be reasonably required, but all at the sole cost and expense of said American Telephone and Telegraph Company, its successors or assigns.

7. This agreement and the transfers made and obligations assumed hereby by the parties hereto shall be void unless within six months from December 1, 1899,
1112 the stockholders of said The American Bell Telephone Company shall, at a meeting duly called, ratify the action of its directors in selling and transferring its property as aforesaid.

Meanwhile, and until such ratification, the foregoing property hereby conveyed or intended so to be, shall remain in the possession of and be operated and the business of the said The American Bell Telephone Company shall be conducted as heretofore by said Company, but the net earnings and profits of the property transferred and of the business transacted therewith shall belong to said American Telephone and Telegraph Company in case of said ratification.

8. Subject to ratification as aforesaid, this agreement shall take effect as of the thirtieth day of December, 1899, but nothing herein contained shall prevent the directors of said The American Bell Telephone Company from declaring a regular dividend of three per cent. and an extra dividend not exceeding one and one-half per cent. to its stockholders of record at the close of business December 30, 1899.

IN WITNESS WHEREOF on this eleventh day of December, 1899, said parties have caused their respective corporate seals to be hereto affixed and these presents to be signed in their names and behalf by their respective officers thereto duly authorized."

Said contract and said purchase of stocks and bonds by said American Company were subsequently ratified and approved by the stockholders of the American Bell Company and the American Company respectively.

City's Exhibit 120.

Extract From the Certificate of Incorporation of American Telephone and Telegraph Company, Incorporated Under the Laws of the State of New York, March 3, 1885:

We, Edward J. Hall, Junior, of the City of Elizabeth, State of New Jersey, Thomas B. Doolittle, of the City of Bridgeport, State of Connecticut, Joseph P. Davis and Anzi S. Dodd, of the City of New York, State of New York, do hereby associate ourselves together for the purpose of constructing, buying, owning, leasing, or otherwise obtaining, lines of electric telegraph partly within and partly beyond the limits of the State of New York, and of equipping, using, operating or otherwise maintaining, the same; and of becoming a body politic and corporate under and by virtue of the provisions of an act of the legislature of the State of New York entitled "An Act to provide for the incorporation and regulation of telegraph companies," passed April 12, 1848, and the various Acts amendatory thereof or supplemental thereto; and of having and exercising all and every of the powers, privileges, franchises and immunities in and by said Acts conferred. And in pursuance of the requirements of the various Acts aforesaid, and for the purposes above set forth, we do hereby declare and certify as follows:

First. The name assumed to distinguish such association and to be used in its dealings, and by which it may sue and be sued, is The American Telephone and Telegraph Company.

Second. The general route of the lines of telegraph of said association will be from a point or points in the city of New York, along all railroads, bridges, highways and other practicable, suitable and convenient ways or courses, leading thence to the Cities of Albany, Boston, and the intermediate cities, towns and places, also from a point or points in and through the City of New York, and thence through and across the Hudson and East rivers and the bay and harbor of New York, to Jersey City, Long Island City and Brooklyn, and along all railroads, bridges, highways and other practicable, suitable and convenient ways and courses to the Cities of Philadelphia, Baltimore, Washington, Richmond, Charleston, Mobile and New Orleans, and to all intermediate cities, towns and places; and in like manner to the Cities of Buffalo, Pittsburg, Cleveland, Cincinnati, Louisville, Memphis, Indianapo-

lis, Chicago, Saint Louis, Kansas City, Keokuk, Des Moines, Detroit, Milwaukee, Saint Paul, Minneapolis, Omaha, Cheyenne, Denver, Salt Lake City, San Francisco, and Portland, and to all intermediate cities, towns and places, and also along all railroads, bridges, highways and other practicable, suitable and convenient ways and courses as may be necessary or proper for the purpose of connecting with each other one or more points in said City of New York, and in each of the cities, towns and places hereinabove specifically or generally designated.

And it is further declared and certified that the general route of the lines of this association, in addition to those hereinbefore described or designated, will connect one or more points in each and every city, town or place in the State of New York with one or more points in each and every other city, town or place in said state, and in each and every other of the United States, and in Canada and Mexico, and each and every of said cities, towns and places is to be connected with each and every other city, town or place in said states and countries, and also by cable and other appropriate means with the rest of the known world as may hereafter become necessary or desirable in conducting the business of this association.

CITY EXHIBITS 121.

OFFICE OF THE ATTORNEY GENERAL.

Washington, D. C.

January 7, 1913.

Honorable Charles A. Prouty,
Chairman, Interstate Commerce Commission,
Washington, D. C.

MY DEAR SIR:

This Department has been engaged for some time past in an investigation of certain complaints made on the part of persons interested in independent telephone companies against the American Telephone and Telegraph Company. There are said to be some 20,000 independent telephone companies, representing investments aggregating many millions of dollars, which together operate somewhat more than 4,000,000 telephones. No one of these companies represents capital or business comparable in size with that of the American Company or any of its principal subsidiary companies. The American Telephone and Telegraph Company, either directly, or through subsidiary companies whose stock it owns, operates what is known generally as the Bell Telephone System, which reaches upwards of 70,000 places, distributed among practically all the States of the Union, having some 4,500,000 telephones in use, and operating the principal long distance lines between the States. It has an invested capital of a book value of nearly six hundred million dollars. It also is the owner of a large block of stock of The Western Union Telegraph Company, through which it practically controls the operations of the telegraph and cable lines of that corporation. The policy of the company is set forth in the annual report of its directors to the stockholders, for the year ending December 31, 1910, as follows:

> "It is believed that the telephone system should be universal, interdependent and inter-communicating, affording opportunity for any subscriber of any exchange to communicate with any other subscriber of any other exchange within the limits of speaking distance, giving to every subscriber every possible additional facility for *annihilating time or distance by use of electrical transmission of intelligence or personal communication.* It is believed that some sort of a connection with the telephone system should be within the reach of all. It is believed further, that this idea of universality can be broad-

ened and applied to a *universal wire system for the electrical transmission of intelligence* (*written or personal communication*) from every one in every place to every one in every other place, a system as universal and as extensive as the highway system of the country which extends from every man's door to every other man's door.

It is not believed that this can be accomplished by separately controlled or distinct systems nor that there can be competition in the accepted sense of competition.

It is believed that all this can be accomplished to the reasonable satisfaction of the public with its acquiescence, under such control and regulation as will afford the public much better service at less cost than any competition or government-owned-monopoly could permanently afford and at the same time be self-sustaining."

* * * * * *

"With the extension of the speaking limits of the telephone over connecting lines came also the necessity for the extension of the territorial limits of the exchange system, the necessity of standardization, uniformity of apparatus and operating methods, and an effective common control over all. The necessity for system was the beginning of the Bell System. The combination of the separate exchanges and lines into larger aggregations or organizations followed. It was necessary to have more effective organization with more effective administration and management, and with resources sufficient to make the changes which experiment and experience had found necessary.

It is impossible to define the territorial limitations of a telephone system because from every exchange center communication is wanted up to the talking limits in every direction.

This process of combination will continue until all telephone exchanges and lines will be merged either into one company owning and operating the whole system, or until a number of companies with territories determined by political, business or geographical conditions, each performing all functions pertaining to local management and operation, will be closely associated under the control of one central organization exercising all the functions of centralized general administration. But whatever may be the form of the operating organization, there is bound to be for legal purposes and the holding of franchises, some sort of subordinate state organiza-

tion which will bring the business and property in each locality under the jurisdiction of the state in which it is situated and operated.

The American Telephone and Telegraph Company, which is the owner of all or part of each company forming the Bell System, is not simply a holding company. It is not a combination that has eliminated competition between the companies controlled by it. There can be no rivalry or competition between local exchanges in adjacent territory. Those desiring the service of exchanges in adjacent territory in addition to their own can get it much better and cheaper through their local exchange. To give direct individual wires from one exchange territory into another would be impractical from the multiplication of lines and prohibitive on account of cost. The American Telephone and Telegraph Company is a centralized general administration for all the companies. It does the financing for the extension of the business. It furnishes the engineering, operating and other experts. It maintains a productive and protective organization so far as patents are concerned. It defends all the companies against all infringements. It undertakes to bring about improvements by working out the ideas and suggestions of others, both in and out of the business. Its agents keep each company fully informed of all that is going on in the field. It avoids all duplication of efforts, of experiments, of trial of new methods, apparatus, etc. It looks after the public relations of the companies. In other words, it performs all that service which is common to all, leaving to the local companies the local management. The organization is not unlike that of the United States, each local company occupying its own territory and performing all local functions, the American Telephone and Telegraph Company binding them all together with its long-distance lines and looking after all the relations between the local companies and between local companies and other companies. To have developed the telephone industry to its present state of efficiency would have been beyond the ability of any one of the local companies.

All independent systems which have been started have more or less followed the same lines, but within restricted areas, whether built by one company or interest or by several. First, the local exchange, then the toll line to outlying points, and then the long-distance line connect-

ing with other independent exchanges, tying them together to form a system affording facilities for communication between the subscribers of one exchange and the subscribers of the other, but limited in scope, and without the community of interest necessary to a common system.

In other words we have the Bell System on the one side, developed on the lines of a universal, intercommunicating and interdependent service. We have the opposition on the other side, segregated exchanges or limited systems without universality, incomplete and inefficient, neither interdependent nor intercommunicating, except to a limited extent."

In carrying out the policy so frankly outlined in this statement, representatives of many of the independent companies have complained that the American Company has not contented itself with the normal extension of its system, but that it has purchased competing lines in such manner and in such circumstances as to destroy competition which would otherwise have furnished the public with better facilities at lower rates than have since obtained, and that it has refused either directly or through competitive and originally independent lines acquired by it, to make connections between local lines not owned or controlled by it and its own long distance lines, and has terminated contracts and arrangements for the interchange of business between the lines so acquired and lines of companies not owned or controlled by the American companies. Complaints are also made that in case where the American companies have assumed to make such connections and to interchange business with independent companies, they have done so in such manner, as in effect, to prevent a satisfactory exchange of facilities of communication between the American lines and those not controlled by that company, thereby intending to discourage the patrons of the independent companies and drive them to the American companies.

Complaints are also made that the American Company has discriminated between the lines of the Western Union Telegraph Company, in whose stock it owns a large interest as above mentioned, and the lines of the Postal Telegraph Company, in which it is not interested, in cases where subscribers to its telephone lines request to be put in communication with the Postal Company for the purpose of giving it messages to be transmitted by telegraph.

It is also complained that the rates maintained by the American companies for local and long distance telephone

service are unduly high in places and between communities where there is no competition; that wherever independent companies have been established, rates have been greatly reduced, and that in every instance when the American Company has secured control of independent companies it has immediately increased the rates to an undue extent.

Representatives of independent companies contend that the American Company should receive and interchange business with them on a basis analogous to that on which transportation by railroad is conducted, while the American Company maintain that such interchange is not compelled by statute and is impracticable.

Many of these questions, it seems to me, cannot be appropriately dealt with by the law department of the government, but should be made the subject of regulation after a careful investigation of the whole subject by your honorable body. The powers vested in you by statute, appear to me to be ample to enable you to make a comprehensive and thorough investigation of the matter. It may be that as a result of such investigation, you will conclude that additional legislation should be suggested to Congress. Quite a number of the states have enacted laws vesting in public utilities commissions or similar bodies, jurisdiction, which has been executed in some instances, with respect to the acquisition of telephone lines of one company by another, and with respect to the interchange of business and facilities between telegraph and telephone lines. State regulation, however, cannot be a satisfactory method of ultimate solution of the questions arising out of telephone operation. The value of a telephone service depends largely upon the facility of connecting every individual telephone user with any point upon any telephone line in the United States; but this should be attained under conditions which secure to the public the maximum of convenience upon the most reasonable terms consistent with a fair return upon the investment and under suitable supervision and control by your honorable body.

The Interstate Commerce Act as at present in force, makes telegraph, telephone and cable companies engaged in sending messages from one State, Territory or District of the United States to any other State, Territory or District of the United States, or to any foreign country, common carriers within the meaning and purpose of the act. It requires all charges for service rendered in the transmission of messages by telegraph, telephone or cable in interstate or foreign com-

merce or in connection therewith, to be just and reasonable, and makes it unlawful for any common carrier subject to the provisions of the act, to make or give any undue or unreasonable preference or advantage to any particular person, etc., or locality, or to any particular description of traffic in any respect whatsoever, or to subject any particular person, Company, etc., or locality or any particular description of traffic, to any undue or unreasonable prejudice or disadvantage in any respect whatsoever.

The 6th section of the act which requires common carriers subject to its provisions to file with the Commission and print and keep open to public inspection schedules of rates, fares and charges, is probably not broad enough to extend to telegraph and telephone companies; but the 15th section confers upon the Commission ample power of investigation on its own initiative and enacts that if the Commission shall be of opinion—

> "that any individual or joint rates or charges whatsoever demanded, charged or collected by any common carrier or carriers subject to the provisions of this Act for the transportation of persons or property or for the transmission of messages by telegraph or telephone as defined in the first section of this Act, or that any individual or joint classification, regulations or practices whatsoever of such carrier or carriers subject to the provisions of this Act are unjust or unreasonable or unjustly discriminatory, or unduly preferential or prejudicial or otherwise in violation of any of the provisions of this Act, the Commission is hereby authorized and empowered to determine and prescribe what will be the just and reasonable individual or joint rate or rates, charge or charges, to be thereafter observed in such case as the maximum to be charged, and what individual or joint classification, regulation, or practice is just, fair and reasonable to be thereafter followed, and to make an order that the carrier or carriers shall cease and desist from such violation to the extent to which the Commission finds the same to exist, and shall not thereafter publish, demand, or collect any rate or charge for such transportation or transmission in excess of the maximum rate or charge so prescribed, and shall adopt the classification and shall conform to and observe the regulation or practice so prescribed."

Moreover, by the 20th section, the Commission is author-

ized not only to require annual reports from the common carriers subject to the act, but also, by general or special orders, to require them to file monthly reports of earnings and expenses "and to file periodical or special or both periodical and special, reports concerning any matters about which the Commission is authorized or required by this or any other law to inquire or to keep itself informed or which it is required to enforce."

Under the provisions of the statute referred to, the Commission is, therefore, fully empowered to make the most thorough investigation into the rates and practices of the telephone companies to determine what are reasonable maximum rates to be charged for communication from one State to another, and the practice to be observed in all of the dealings of the telephone companies with the public and with other companies. No comprehensive investigation into the organization, management and conduct of telephone companies, has so far as I am aware, even been had by the governmental agency. The investigation of this Department has dealt only with certain suggested violations of the Sherman Anti-Trust Act, but the whole problem of the relation of government to the transmission of intelligence by telephone and telegraph is one of such far-reaching importance and so affects the welfare of the entire community, that it appears to me to be a subject which should be thoroughly studied from the standpoint of the public, in order that a governmental policy with respect to the telephone and telegraph business may be intelligently formulated and adopted. The Interstate Commerce Commission is clothed with the powers above referred to, and the subject is one affecting such general public interests that I venture to suggest that you undertake this work. If these suggestions commend themselves to your honorable body, I beg to add that all of the information which has been collected in this Department bearing upon the subject, will be cheerfully put at your disposal.

Very respectfully,

GEO. W. WICKERSHAM,
Attorney General.

(72) On or about January 13, 1913, the Interstate Commerce Commission entered the following order:

> "Information having been lodged with this Commission to the effect that the American Telephone & Telegraph Company, by the operation of itself and allied companies, is attempting to monopolize the telephone and telegraph

business of the United States and is fast driving out of existence independent competitors; and further, that this company and other telephone and telegraph companies are guilty of unlawful discriminations and are imposing unreasonable rates, rules, regulations and practices in the conduct of their business.

It is ordered, That a proceeding of inquiry and investigation be, and it is hereby, instituted into and concerning the history, the financial operations, the rates, rules, regulations and practices of telephone and telegraph companies subject to the act to Regulate Commerce, with a view to the making of a comprehensive report and to the issuance of such order, or orders, as may be necessary to correct such discriminations and make applicable reasonable rates and practices.

It is further ordered, That this proceeding be set for hearing at such times and places, and that such persons be required to appear and testify, to afford such information, and to produce such books, documents and papers as the Commission may hereafter direct, and that investigation be carried on in the meantime by such means and methods as may be deemed necessary and proper."

CITY EXHIBIT 123.

This agreement, made and entered into this second day of November, 1891, by and between the American Telephone and Telegraph Company, a corporation duly organized and existing under and by virtue of the laws of the State of New York, hereinafter referred to as the American Company, party of the first part, and the Central Union Telephone Company, a corporation duly organized and existing under and by virtue of the laws of the State of Illinois, hereinafter referred to as the Central Company, party of the second part, both of said parties holding licenses from The American Bell Telephone Company, Witnesseth:

WHEREAS: The parties hereto desire temporarily to modify some of the provisions of said licenses and to provide more explicitly for certain details of operation;

Now, Therefore, in consideration of the premises, and of the sum of one dollar ($1.00) paid by said party of the first part to said party of the second part (receipt whereof is hereby acknowledged), and for other and further valuable considerations, the parties hereto agree as follows:

First. That the Central Company shall build, equip and maintain special terminal loops of such reasonable and suitable construction as shall be approved by the American Company, from its several exchange offices to such points within the districts of the respective exchanges as the American Company may from time to time request, and shall inspect and maintain the instruments connected therewith as directed by the American Company, for which the American Company shall pay the Central Company, in equal monthly installments, for one year, and thereafter until terminated by thirty days' notice in writing, at the annual rates hereinafter specified for the several exchanges, viz.:

1. For each loop built in any exchange district having two thousand (2,000) subscribers, or over, to a point within a radius of one-half mile from the respective exchange office, thirty-six dollars ($36). For each loop to a point beyond a radius of one-half mile, and within a radius of three-quarters of a mile, fifty-one dollars ($51). For each loop beyond a radius of three-quarters of a mile, and within a radius of one mile, sixty-three dollars ($63), —and to points beyond a radius of one mile, for such longer primary periods or at such rates to be agreed

upon in advance as in the judgment of the Central Company will reasonably insure it against loss or undesirable risk.

2. For each loop built in any exchange district having less than two thousand (2,000) subscribers, but not less than four hundred (400) subscribers, to a point within a radius of one-half mile from the respective exchange office, thirty ($30) dollars. For each loop to a point beyond a radius of one-half mile, and within a radius of three-quarters of a mile, forty-two dollars ($42). For each loop to a point beyond a radius of three-quarters of a mile, and within a radius of one mile, fifty-one dollars ($51),—and to points beyond a radius of one mile, for such longer primary periods or at such rates to be agreed upon in advance as in the judgment of the Central Company will reasonably insure it against loss or undesirable risk.

3. For each loop built in any other exchange district to a point within a radius of one-half mile from the respective exchange office, twenty-four dollars ($24). For each loop to a point beyond a radius of one-half mile, and within a radius of three-quarters of a mile, thirty-three dollars ($33). For each loop to a point beyond a radius of three-quarers of a mile, and within a radius of one mile, forty-two dollars ($42); and to points beyond a radius of one mile, for such longer primary periods or at such rates to be agreed upon in advance as in the judgment of the Central Company will reasonably insure it against loss or undesirable risk.

4. For inspection and maintenance of instruments and batteries, (which instruments and batteries shall be furnished by the American Company) twenty-four dollars ($24); provided that the American Company may inspect and maintain any or all of said instruments and batteries, whenever and so long as it may desire so to do, by giving written notice thereof to the Central Company,—and provided that, during such time as the American Company shall so inspect and maintain such instruments and batteries, payments therefor by it to the Central Company shall cease.

Second. That the Central Company shall furnish such labor and services, including switching, reports and collections, as the American Company may deem necessary for the proper management and operation of such of its lines and

loops as may be located within the territory of the Central Company, for which the American Company shall pay the Central Company as follows:

1. For special operating service in the several exchanges the sums provided in "Schedule A," which schedule shall be signed by the general managers of the respective parties, attached to and thereupon shall become a part of this contract. Said "Schedule A" may be changed or modified at intervals of not less than six months (thirty days after notice in writing given by either party to the other), or whenever additional exchanges are connected directly with the lines of the American Company, by mutual agreement of said general managers, which agreement shall be reduced to writing, signed by said general managers, attached to and thereupon shall become a part of this contract, with the same force and effect as if done at the time of its execution; provided that the American Company may, whenever and so long as it so desires, in whole or in part, perform such service, and payments to the Central Company shall cease during the time and for so much of such service as may be performed by the American Company.

2. A commission of fifteen per cent (15%) on the cash receipts of the American Company from business originating upon the lines of the Central Company, not exceeding ten cents (10c) for any single connection; but it shall not apply on any business originating on the special terminal loops provided for in Article First; nor on business passing between points wholly within the territory of the Central Company, as provided in Article Third.

Third. That the Central Company may use the lines of the American Company for the transmission of messages between points wholly within the territory of the Central Company, when and so far as, in the judgment of the American Company, such use shall not interfere with its own use of said lines, and shall pay therefor to the American Company one-half of its gross receipts from such use; provided, however, that the charges for such service shall not be less than the rates fixed by the American Company for similar service.

Fourth. That the Central Company shall furnish such other labor and materials as the American Company may from time to time request for the care and maintenance of

such of its property as may be located within the territory of the Central Company, for which the American Company shall pay the Central Company the actual cost of labor and materials so furnished, plus ten per cent (10%).

Fifth. That to promote the establishment of Public Stations furnished with equipment and attendance suitable for "Long Distance" business, the American Company agrees that it will, in addition to the commssion provided for in Article Second, Section 2, contribute an amount equal to fifteen per cent (15%) of its cash receipts from business originating at such public stations of the Central Company, not exceeding ten cents (10c) for any single connection; and the Central Company agrees to furnish a sufficient number of such stations to meet the reasonable needs of the public for such facilities; provided, however, that the Central Company shall not be required to establish or maintain public stations unless sufficient revenue be derived therefrom by it to justify such expense. A schedule of such stations (marked "Schedule B") shall be attached to this contract, and changes may be made therein, from time to time, by written agreement between the general managers of the respective parties, and payments shall be made only on business originating at stations so specified.

Sixth. That each party shall render to the other such reports and other data as may be requisite for the adjustment of all accounts between said parties; such reports and data shall be rendered as promptly as possible, and not later than the twentieth of each month for the month last preceeding.

Seventh. That all details of operation connected with the business of the American Company shall be under its supervision and control.

Eighth. That this agreement shall continue for one year from the date first above written, and thereafter until the expiration of thirty days after notice in writing has been given by either party to the other of intention to terminate the same; (such termination shall not operate or apply as to any special terminal loops, or other facilities which may have been previously contracted for, between the parties hereto, for periods extending beyond the date of such termination) and, that all its conditons and provisions shall be binding upon the successors and assigns of the respective parties.

Ninth. That it is expressly understood and agreed between the parties hereto that nothing herein contained shall

be construed as requiring either party to do or permit any act in violation of any of its agreements with The American Bell Telephone Company; and that upon notice from The American Bell Telephone Company of such violation, so much of this contract as may be in violation of such agreements, shall thereupon become void.

IN WITNESS WHEREOF, on the day and year first above written, the parties hereto have caused these presents to be executed in duplicate and their corporate seals to be affixed thereto by their respective officers thereunto duly authorized.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY,
By EDWD. J. HALL, JR.,
Vice-President.

Attest:
MELVILLE EGLESTON,
(Seal) *Secretary.*

CENTRAL UNION TELEPHONE COMPANY,
F G B
By HENRY B. STONE,
President.

Attest:
W. S. CHAPMAN,
(Seal) *Secretary.*

City's Exhibit 126.

List of Directors as of December 31st for the Following Years

*Officers

1884
W. H. Forbes
*Anson Stager
John Crerar
J. R. Jones
Theo. N. Vail
*Norman Williams
John DeKoven
John B. Drake
C. E. Perkins

1885
*Norman Williams
John DeKoven
J. R. Jones
C. Jay French
John Crerar
John B. Drake
C. E. Perkins
Theo. N. Vail

1886
*Norman Williams
John DeKoven
J. Russell Jones
George L. Phillips
John Crerar
John B. Drake
*C. N. Fay
C. E. Perkins
Theo. N. Vail

1887
John Crerar
John B. Drake
J. Russell Jones
George L. Phillips
John DeKoven
*C. N. Fay
C. E. Perkins
Howard Stockton
*Norman Williams

1888
John Crerar
John DeKoven
C. E. Perkins
Howard Stockton
John B. Drake
J. Russell Jones
*George L. Phillips
*Norman Williams

1889
John Crerar
John B. Drake
J. Russell Jones
C. E. Perkins
John DeKoven
John E. Hudson
Robert T. Lincoln
*Arthur D. Wheeler
*Norman Williams

1890 George Alberee
John B. Drake
J. Russell Jones
C. E. Perkins
John DeKoven
John E. Hudson
Robert T. Lincoln
*Henry B. Stone
*Norman Williams

1891 George Albree
John B. Drake
John E. Hudson
C. E. Perkins
John DeKoven
J. Russell Jones
Robert T. Lincoln
*Henry B. Stone
*Norman Williams

1892 John DeKoven
Arthur G. Fuller
J. Russell Jones
C. E. Perkins
John B. Drake
John E. Hudson
Robert T. Lincoln
*Henry B. Stone
*Norman Williams

1893 (Same as in year 1892)

1894 (Same as in year 1892)

1895 John DeKoven
Arthur G. Fuller
J. Russell Jones
C. E. Perkins
George M. Pullman
William A. Jackson
*Henry B. Stone
*Norman Williams
Robert T. Lincoln

1896 J. Russell Jones
*Norman Williams
John DeKoven
Arthur G. Fuller
*Henry B. Stone
Robert T. Lincoln
George M. Pullman
C. E. Perkins
William A. Jackson

1897 J. Russell Jones
*John M. Clark
*Norman Williams
Robert T. Lincoln
John DeKoven
William A. Jackson
Arthur G. Fuller
C. E. Perkins

1898 J. Russell Jones
*John M. Clark
*Norman Williams
John E. Hudson
Robert T. Lincoln
Byron L. Smith
Albert A. Sprague
William A. Jackson
Joseph P. Davis
Arthur G. Fuller
C. E. Perkins

1899 J. Russell Jones
*John M. Clark
Robert T. Lincoln
Arthur D. Wheeler
*Byron L. Smith
Albert A. Sprague
C. E. Perkins
William A. Jackson
John E. Hudson
Joseph P. Davis

1900 *John M. Clark
J. Russell Jones
Robert T. Lincoln
*Byron L. Smith
Arthur D. Wheeler
Albert A. Sprague
William A. Jackson
Chauncey Keep
Joseph P. Davis
C. E. Perkins

1901 J. Russell Jones
Robert T. Lincoln
John M. Clark
Albert A. Sprague
*John I. Sabin
Frederick P. Fish
*Byron L. Smith
C. E. Perkins
*Arthur D. Wheeler
Chauncey Keep
Joseph P. Davis

1902 (Same as in year 1901)

1903 John M. Clark
*Arthur D. Wheeler
J. Russell Jones
Robert T. Lincoln
*Byron L. Smith
Frederick P. Fish
Albert A. Sprague
Chauncey Keep
C. E. Perkins
D. Mark Cummings
George M. Cumming

1904 *Arthur D. Wheeler
John M. Clark
Robert T. Lincoln
J. Russell Jones
Frederick P. Fish
Albert A. Sprague
C. E. Perkins
D. Mark Cummings
Chauncey Keep
Joseph P. Davis
*Byron L. Smith

1905 J. Russell Jones
John M. Clark
Robert T. Lincoln
*Arthur D. Wheeler
*Byron L. Smith
Albert A. Sprague
C. E. Perkins
D. Mark Cummings
Chauncey Keep
Frederick P. Fish

1906 J. Russell Jones
John M. Clark
Robert T. Lincoln
*Arthur D. Wheeler
*Byron L. Smith
*Charles E. Mosley
Albert A. Sprague
C. E. Perkins
D. Mark Cummings
Chauncey Keep
Frederick P. Fish

1907 J. Russell Jones
John M. Clark
Robert T. Lincoln
*Arthur D. Wheeler
*Byron L. Smith
Albert A. Sprague
Theo. W. Robinson
Theo. N. Vail
D. Mark Cummings
Chauncey Keep
*Charles E. Mosley

1908 J. Russell Jones
John M. Clark
Robert T. Lincoln
Arthur D. Wheeler
*Byron L. Smith
Albert A. Sprague
Theo. N. Vail
D. Mark Cummings
Chauncey Keep
*B. E. Sunny
Theo. W. Robinson

1909 John M. Clark
Robert T. Lincoln
Arthur D. Wheeler
*Bryon L. Smith
Albert A. Sprague
Theo. N. Vail
D. Mark Cummings
Chauncey Keep
*B. E. Sunny
Theo. W. Robinson

1910 D. Mark Cummings
*Angus S. Hibbard
Chauncey Keep
Robert T. Lincoln
William H. Miner
Theo. W. Robinson
*Byron L. Smith
Albert A. Sprague
*B. E. Sunny
Theo. N. Vail
Arthur D. Wheeler

1911 D. Mark Cummings
*Alonzo Burt
Chauncey Keep
Robert T. Lincoln
William H. Miner
Theo. W. Robinson
Byron L. Smith
Albert A. Sprague
*B. E. Sunny
Theo. N. Vail
Arthur D. Wheeler

1912 U. N. Bethell
*Alonzo Burt
D. Mark Cummings
Chauncey Keep
Robert T. Lincoln
William H. Miner
John J. Mitchell
Byron L. Smith
Albert A. Sprague
*B. E. Sunny
Theo. N. Vail

1913 (Same as in year 1912)

1914 U. N. Bethell
*Alonzo Burt
D. Mark Cummings
Marvin Hughitt
Chauncey Keep
Robert T. Lincoln
William H. Miner
John J. Mitchell
Albert A. Sprague
*B. E. Sunny
Theodore N. Vail

1915 U. N. Bethell
*Alonzo Burt
D. Mark Cummings
Angus S. Hibbard
Marvin Hughitt
Chauncey Keep
Robert T. Lincoln
William H. Miner
John J. Mitchell
*B. E. Sunny
Theodore N. Vail

1916 (Same as in year 1915)

1917 (Same as in year 1915)

1918 U. N. Bethell
*Alonzo Burt
D. Mark Cummings
Marvin Hughitt
Chauncey Keep
Robert T. Lincoln
William H. Miner
John J. Mitchell
Theo. W. Robinson
*Bernard E. Sunny
Theo. N. Vail

1919 *Alonzo Burt
D. Mark Cummings
Angus S. Hibbard
Marvin Hughitt
Chauncey Keep
N. C. Kingsbury
William H. Miner
John J. Mitchell
Theo. W. Robinson
*Bernard E. Sunny
Theo. N. Vail

1920 *W. R. Abbott
*E. S. Bloom
D. Mark Cummings
Angus S. Hibbard
Marvin Hughitt
Chauncey Keep
William H. Miner
John J. Mitchell
Theodore W. Robinson
*B. E. Sunny
H. B. Thayer

1921 *W. R. Abbott
*Edgar S. Bloom
D. Mark Cummings
David R. Forgan
Marvin Hughitt
Chauncey Keep
William H. Miner
John J. Mitchell
Theo. W. Robinson
*B. E. Sunny
H. B. Thayer

1922 *W. R. Abbott
Edgar S. Bloom
D. Mark Cummings
David R. Forgan
Marvin Hughitt
Chauncey Keep
William H. Miner
John J. Mitchell
Theo. W. Robinson
B. E. Sunny
H. B. Thayer

1923 (Same as Year 1922)

1924 (Same as Year 1922)

1925 *W. R. Abbott
Edgar S. Bloom
D. Mark Cummings
David R. Forgan
W. S. Gifford
Marvin Hughitt
Chauncey Keep
Wm. H. Miner
John J. Mitchell
Theo. W. Robinson
B. E. Sunny

CITY'S EXHIBIT No. 127.

SHARES OF ILLINOIS BELL TELEPHONE COMPANY'S STOCK (QUALIFYING AND/OR DIRECTLY OWNED) HELD BY DIRECTORS OF THE COMPANY DURING THE YEARS 1911 TO 1925, BOTH INCLUSIVE.

D. MARK CUMMINGS

	Qualifying	Personally Owned
1911	.....	2942
1912	.....	17
1913	.....	5
1914	.....	5
1915	.....	5
1916	.....	5
1917	.....	5
1918	.....	5
1919	.....	5
1920	.....	5
1921	.....	5
1922	.....	5
1923	.....	5
1924	.....	5
1925	.....	5

ALONZO BURT

1911	.....	113
1912	10	...
1913	10	2
1914	10	2
1915	10	40
1916	10	45
1917	10	219
1918	10	225
1919	10	225

CHAUNCEY KEEP

1911	.....	234
1912	.....	14
1913	.....	14
1914	.....	14
1915	.....	14
1916	.....	15
1917	.....	18
1918	.....	20
1919	.....	20
1920	.....	20
1921	.....	25
1922	.....	30
1923	.....	35
1924	.....	35
1925	.....	40

ROBERT T. LINCOLN

1911	.....	223
1912	10	...
1913	10	2
1914	10	2
1915	10	2
1916	10	2
1917	10	2
1918	10	2

WILLIAM H. MINER

1911	.....	10
1912	10	5
1913	10	7
1914	10	7
1915	10	7
1916	10	7
1917	10	7
1918	10	7
1919	10	7
1920	10	7
1921	10	2
1922	10	39
1923	10	46
1924	10	...
1925	10	...

THEO. W. ROBINSON

1911	.....	30
1918	10	50
1919	10	50
1920	10	50
1921	10	50
1922	10	60
1923	10	70
1924	10	1
1925	10	1

BYRON L. SMITH

1911	.....	1063
1912	10	...
1913	10	2

BERNARD E. SUNNY

1911	.....	900
1912	10	...
1913	10	2
1914	10	106
1915	10	150
1916	10	175
1917	10	215
1918	10	200
1919	10	200
1920	10	200
1921	10	200
1922	10	...
1923	10	...
1924	10	...
1925	10	...

ALBERT A. SPRAGUE

1911	.....	1205
1912	.....	5
1913	.....	5
1914	.....	5

THEODORE N. VAIL

1911	12	...
1912	12	...
1913	12	...
1914	12	...
1915	12	3
1916	12	3
1917	12	4
1918	12	4
1919	12	4

ARTHUR D. WHEELER

1911	10	...

U. N. BETHELL

1912	10	...
1913	10	100
1914	10	100
1915	10	100
1916	10	111
1917	10	135
1918	10	150

JOHN J. MITCHELL

1912	10	...
1913	10	2
1914	10	2
1915	10	2
1916	10	2
1917	10	2
1918	10	2
1919	10	2
1920	10	2
1921	10	2
1922	10	2
1923	10	2
1924	10	2
1925	10	3

MARVIN HUGHITT

1914	.....	4
1915	.....	4
1916	.....	4
1917	.....	4
1918	.....	4
1919	.....	4
1920	.....	4
1921	.....	5
1922	.....	6
1923	.....	7
1924	.....	7
1925	.....	8

ANGUS S. HIBBARD

1915	.....	13
1916	.....	13
1917	.....	13
1919	10	3
1920	10	3

N. C. KINGSBURY

1919	10	...

W. R. ABBOTT

1920	10	...
1921	10	...
1922	10	...
1923	10	...
1924	10	...
1925	10	...

E. S. BLOOM

1920	10	...
1921	10	...
1922	10	...
1923	10	...
1924	10	...
1925	10	...

DAVID S. FORGAN

1921	10	...
1922	10	...
1923	10	...
1924	10	...
1925	10	...

H. B. Thayer

1920	10	...
1921	10	...
1922	10	...
1923	10	...
1924	10	...

W. S. Gifford

1925	10	...

City's Exhibit 128-A.

VOL. I.

General Engineering.

(Letter-Head)

American Telephone and Telegraph Company

New York, N. Y.
January 3, 1921.
G. E. C. No. 1008
Supplementing Specifications
No. 1798.

Dear Sir:

I am sending you herewith one copy of an amendment to Specifications No. 1798 "Manhole Guard." This amendment requires that the guards be painted with an approved red paint in place of the black asphaltum heretofore used. This change has been found desirable from a safety standpoint.

Yours truly,

Vice President and Chief Engineer.

Attached:
Copy of Amendment
to Specifications No. 1798.

(Letter-Head)

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

New York, February 18, 1921.
G. E. C. No. 1025

Dear Sir:

For some time, the Department of Development and Research in cooperation with the Western Electric Company and this department have been studying the question of revising our standard requirements for the thickness of cable sheaths. As a result of this investigation, new requirements for the thickness of cable sheaths have been standardized, and in order that you may be fully advised regarding this matter, I am sending you herewith a copy of Bulletin No. 15, which summarizes the results of this work. The new thicknesses of sheath, it should be noted, involve principally changes in thickness by smaller successive steps, or gradations, than has been the case in the past. These modifications are supported by experience resulting from our long established practice, and by the results of severe service trials of sheaths of less than the new thicknesses.

Arrangements have been made with the Western Electric Company, whereby the new thicknesses of sheath are now being put into use gradually on type "NA" cable of 25, 50, 100, 300 and 400 pairs, "SA" cable of 400 pairs and "T B" cable of 100 pairs. The remaining sizes of these types of cable will be put on the new basis as rapidly as manufacturing conditions will permit.

Yours truly,
VICE PRESIDENT AND CHIEF ENGINEER.

Enclosure:

(Letter-Head)

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

New York, February 25, 1921.
G. E. C. No. 1034
Supplementing G. E. C. No. 634

Dear Sir:

The transmission measuring set described in G. E. C. No. 634 has proven of considerable value for transmission maintenance purposes, especially in connection with central office circuits and equipment. Recently some of the railroad companies have purchased a few of these transmission measuring

sets, together with 2-A oscillators, and we have prepared a set of notes, transmitted herewith, describing the general uses of this equipment and giving tables of losses on the standard circuits and equipment with which they will most frequently be concerned. We have arranged with the Western Electric Company to have these notes printed in pamphlet form with the idea that a pamphlet will be provided with each set furnished to railroad companies or such other non-associated companies as are permitted to obtain this type of transmission measuring set. If you desire any of these pamphlets for your own use or for distribution to the connecting companies, you can now obtain them directly from the Western Electric Company by specifying "Pamphlet on 1-A Transmission Measuring Set and 2-A Oscillator."

There are in the country a large number of connecting telephone companies which, by agreement, are given service over the toll lines of the Bell System. The transmission maintenance of a plant operated by these companies is, therefore, an important item in obtaining the proper grade of toll service over the lines of the Bell System on connections which terminate in the plant of the connecting companies. Also, these tests will be advantageous from the standpoint of the connecting companies by improving the efficiency of their plant for local as well as connecting calls. For this reason we wish to point out the desirability of having the connecting companies test out their plant from a transmission standpoint, using the 1-A transmission measuring set.

There will probably be cases in which the connecting companies are not prepared to make transmission measurements themselves where you will wish to cooperate with them in making measurements, in order to improve transmission on connecting calls, and we see no objections to your doing this when it seems desirable. In cases where the connecting companies are prepared to make the transmission tests themselves, it will, of course, probably be necessary for your transmission people to assist them until they have become familiar with the use of the transmission measuring set. If a connecting company does not feel that they can justify the purchase of a 1-A transmission measuring set, there seems to be no reasons why you should not, if you wish, arrange to lend them a set for the purpose of checking up the transmission efficiency of their connecting plant.

In connection with providing 1-A transmission measuring sets for this work, connecting companies can obtain these,

together with the 2-A oscillators from the Western Electric Company by placing orders for them in the same manner as your company. Since, however, this does not apply to non-connecting companies, it also does not apply to associations of non-connecting companies or to associations in which non-connecting companies are or may be members. Individual connecting companies who are members of such associations can, however, obtain these measuring sets.

We should be glad to have any comments or suggestions you may have to offer with reference to the plan as outlined above. It would also be desirable after you have determined the requirements for testing equipment of the connecting companies in your territory, to advise us of the approximate number of these equipments needed in order that we may arrange with the Western Electric Company to have a sufficient stock of them available.

Yours truly,
VICE PRESIDENT AND CHIEF ENGINEER.

Attached:
Notes, subject,
"1-A Transmission Measuring
Set and 2-A Oscillator—
Description of Instruments
and Directions for their use."

(Letter-Head)

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

New York, March 16, 1921.
G. E. C. No. 1040
Supplementing G. E. C. No. 912.

Dear Sir:

G. E. C. No. 912 advised that the AIS Blackburn ground clamp would be equipped with a $\frac{3}{8}$-inch hexagonal head screw in order that a wrench would be used for setting it up rather than a screwdriver.

The $\frac{3}{8}$ inch hexagonal head screw has been made with a head thickness of 3/32-inch and it has been found that there is a possibility with this thickness, of tools of the No. 63 type slipping off the head. A further change has therefore been made in the clamp to eliminate possible trouble from this source. This change consists in the substitution of a 7/16-inch locknut for the present $\frac{3}{8}$ inch locknut to permit the use of a double ended socket wrench having $\frac{3}{8}$ inch and 7/16 inch sock-

ets on the screwhead and locknut. Tools of the No. 63 type may still be used on the screwhead and locknut if desired.

The Western Electric Company have arranged with the manufacturer to furnish the clamps with the 7/16 inch locknut and this type of clamp will be supplied as soon as the present stock of clamps with ⅜ inch locknuts has been exhausted. It is estimated that at the present rate of consumption the stock will last until July 1.

No change will be made in the code number or the price of the clamp.

Yours truly,
VICE PRESIDENT AND CHIEF ENGINEER.

(Letter-Head)

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

New York, June 6, 1921.
G. E. C. No. 1045
Replacing G. E. C. No. 728.

Dear Sir:

We are sending you herewith a copy of the following specifications:

No. 4120 "The Submersion Treatment of Poles"
No. 4121 "The Butt Treatment of Poles"
No. 4122 "The Perforation Treatment of Poles"

and Bulletin No. 18, "Butt Treated Poles," prepared by the Department of Development and Research.

Specifications No. 3899, "The Butt Treatment of Poles" is replaced by Specifications No. 4121 and Specifications No. 4122.

These three specifications, together with Specifications No. 3627, "Brush Treatment of Poles," cover the treatments by means of which the various possible increases in the service life of poles as described in the bulletin can be obtained.

The bulletin presents the conditions under which the experiments were carried on with treated and untreated chestnut, cedar, and juniper poles, compares the results obtained, and presents the best available bases for determining that method of treatment which is best adapted to the conditions at hand.

It will be noted that each method of treatment has its own peculiarities, and is especially adapted for use under certain conditions.

The Brush Treatment is adapted for use when the poles must be treated in the field, or for treatment at the time of the

replacement inspection. It is the cheapest method, but gives the least added life of any of the methods.

The Submersion Treatment can be practiced in all of the commercial treating plants handling eastern or western cedar poles. Since the treatment of exposed surfaces of interior parts of checks will be more uniform, this treatment should add a little more to the life of the poles than a brush treatment applied by company forces, and in the case of many of the smaller sizes of poles it can be procured at prices comparable with the present cost of the brush treatment.

The Butt Treatment gives a much greater penetration of preservative and consequently a greater additional life, than either of the above methods. The cost is obviously greater, but the results are enough superior to warrant the added expense, provided that a greater increase in life is desired.

The Perforation Treatment is a new method but if it develops in accordance with its present promise, it will represent the best available commercial means of securing maximum increases in the life of cedar poles. At the present time, of the plants commercially treating cedar poles, only that at Sand Point, Idaho, has a perforating machine in actual service. It is expected that other plants will provide facilities during the course of the year and that if present promises as to low cost of treatment are maintained, this method will ultimately be used in place of the older methods when maximum life is desired.

The original process involved the piercing of the difficulty treatable wood so as to facilitate the entrance of preservatives. This was done by means of needle points so as to separate the fibres with as little breaking as possible. The developments relating to the perforating method which have been carried out in this country have tended toward the use of small chisel points which cut the fibres of the wood, making small holes which facilitate the entrance of the preservative to the parts which need to receive it. The effect of this cutting on the strength of the pole is negligible. The attached specifications are based on the latter form of perforations.

Treatments for pole butts are suited for application to pole timbers which are relatively durable above the ground line, such as chestnut, eastern and western cedar. The gain in life for a pole treated by any of the above methods will depend upon the climatic conditions to which it is exposed. For the Submersion Treatment it is necessary to specify the use of seasoned timber exclusively. In the case of the other two

treatments, seasoning of the pole butt occurs during the treatment, and it is possible to treat successfully green or partially seasoned timber as well as seasoned timber. Preference should be given to seasoned poles for these treatments, only for those territories where the climate is hot and dry, and where consequently the loss by splitting would be appreciable if unseasoned poles were furnished.

After periods of heavy demand for poles the supply stock are liable to be so depleted that it may not be possible to produce the desired quantities of poles of the seasoned grade. As this is the current situation, it is desirable that orders be restricted to seasoned poles only where the conditions of use make the employment of green poles undesirable. In all other cases it should be so arranged as to permit of orders being filled from the partly seasoned or green grades so that the seasoned stock, until it fills to normal, will not be heavily drawn upon.

It is essential, when economies are anticipated through the treatment of poles, that attention be paid to the possibility of actually utilizing the increased life that the treatment selected can be expected to yield. Permanency of location of a pole is, therefore, a factor which should be considered in determining the treatment that can economically be applied to it. Where the location is permanent, and the capacity of the line has reached the ultimate that can be expected for that route, or in cases where the ultimate requirements for the line can be reasonably closely predicted, the treatment giving the maximum increase in life should be used. On the other hand, where the permanency of the line is uncertain, or replacement with taller or heavier poles is a future probability, the possibilities of the less expensive treatments which yield a smaller increase in life, should be considered, in view of the fact that their effectiveness can be supplemented, if necessary, by subsequent brush treatments after the pole has been in place some time.

Within the last few years the cost of new poles in place has materially increased. This increase is due partly to the increase in the cost of the pole timber and partly to the increase in labor cost of installing poles. This increased cost of pole timber is the result to a great extent, of conditions that will permanently affect the cost of new poles. The center of timber production is getting farther and farther from the center of pole consumption, thereby causing the transportation charges to mount higher.

Even though this increase in the cost of poles may be temporarily halted or reversed through the changes in market conditions now taking place, the considerable increase in life which can be secured through proper use of the methods available for treating poles, offers opportunities for making important savings in the pole plant.

It has been the practice in the past in constructing cable or light open wire lines, to use poles one or two classes heavier than required from the standpoint of strength. This is sometimes done with the idea of obtaining increased life and sometimes because of the fact that the local pole supply conditions are such that the heavier poles can be obtained at prices only slightly in excess of those for the lower class poles. Where the class is raised with a view to securing additional life only it should be kept in mind that by the proper use of the available methods of treating pole butts, the same or even greater life may be secured from the smaller treated poles. An opportunity is thereby offered for the use of lighter poles on these lines, which will result in important savings not only in the annual charges on poles, but also in initial costs. The subject of the proper class and spacing of poles will be fully covered in the Pole Line Engineering Specifications, one of a series of specifications on Plant Engineering, now being prepared.

Yours truly,

VICE PRESIDENT AND CHIEF ENGINEER.

Enclosure:

Specification No. 4120,
"Submersion Treatment of Poles."

Specification No. 4121,
"The Butt Treatment of Poles."

Specification No. 4122,
"Perforation Treatment of Poles."

Bulletin No. 18, "Butt Treated Poles." Supp. to Spec: Nos. 4121 and 22

CITY'S EXHIBIT No. 128-B.

VOL. II.

GENERAL ENGINEERING.

No. 5 and No. 6 Type Signal Plugs.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY
Telephone and Telegraph Building,
195 Broadway

New York May 3, 1921
G. E. C. No. 1051
Supplementing T. C. No. 55

Dear Sir:

With T. C. No. 55 "Standard Local Operating Methods" there was forwarded Drawing No. 38-Y-795 covering a design of signal plug for use in connection with coin box lines to indicate that signals not agreeing with the deposit claimed by the calling party have been received. Experience with these plugs, which are made of wood, has shown that they do not always fit the jacks snugly. This was due to their being affected by moisture and to their shanks not being slotted to care for variations in the jack sleeves and in the plugs themselves.

The Department of Development and Research in conjunction with the Western Electric Company has investigated the question of obtaining an improved design of plug for this purpose. It has been found necessary to use metal for the plugs in order that they could be held to the proper limits and the effect of moisture prevented. The design adopted, which has been tried out with satisfactory results, is illustrated on the attached Drawing No. 38-Y-1183.

The shank of the plug is slotted in two directions to care for such irregularities as are met, and on the head is assembled a disc of white celluloid. The latter is given a surface suitable to write upon, since it is frequently necessary to indicate on the plug the party line designation or the particular slot affected in the coin box. The side of the head is colored red, white or blue as required.

These plugs have also been found satisfactory for use at toll boards for plugging up certain toll line multiple jacks of circuits which are in trouble. It will therefore be considered

standard to use these metal plugs for those cases where it is the present practice to use some form of trouble plug on toll lines; a red plug being used to indicate circuits in trouble outside the office and a white plug to indicate circuits that have been transferred to spare terminal equipment. The number of the spare jack can be placed on the plug if desired.

Code numbers have been assigned to the signal plugs for use with No. 49 and No. 92 jacks as follows:

No. 49 Jack	Color	No. 92 Jack
5A	Red	6A
5B	White	6B
5C	Blue	6C

The Western Electric Company is now in a position to furnish the new signal plugs and has advised that the price will be $0.33 each for the first 9,000; subsequent lots will be $0.20 each.

Yours truly,
Vice President and Chief Engineer.

Attached:
Drawing No.
38-Y-1183.

Subject: Line Impedance Measuring Apparatus.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY
Telephone and Telegraph Building
195 Broadway

New York June 21, 1921.
G. E. C. No. 1062
Supplementing G. E. C. No. 941

Dear Sir:

Since the issuance of G. E. C. No. 941 the Development and Research Department have completed their work in connection with a more compact form of inductometer for use with the line impedance bridge.

The new inductometers differ from the ones originally furnished under Specifications KS-1373 (now coded 1-A) in that they are much more compact, more rugged and somewhat cheaper. For their reason we have arranged with the Western Electric Company that on all present orders for impedance bridges the new inductometers, rather than the old type, will be supplied.

In ordering impedance bridges in the future the requisition should be worded as follows:—

1-B Impedance Bridge.

If, for any reason, a bridge with an old type inductometer is desired, it should be ordered as:

1-A Impedance Bridge;

noting on the requisition that the 1-B type is not desired.

It should be noted that on account of the higher effective resistance of the smaller inductometers the two different types can not be used interchangeably.

Yours truly,

Vice President and Chief Engineer.

Subject: Long Handled Shovels and Digging Spoons.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

Telephone and Telegraph Building

195 Broadway

New York August 30, 1921
G. E. C. No. 1080

Dear Sir:

Long handled shovels and digging spoons are now furnished to the Associated Companies under Specifications Nos. 3011 and 3012 which were issued about fourteen years ago. For some time shovels and spoons purchased under these specifications have been supplied by one manufacturer.

Experience indicates that under these conditions it should be practicable to maintain the quality of tool supplied and to make some saving in the cost of the tools, if we eliminate the use of specifications for purchasing and adopt the practice of buying shovels and spoons shaped according to our standard designs and in quality and workmanship equal to the best grade sold by the manufacturer who has been supplying us. Under such an arrangement the Western Electric Company's inspection charge and the expense incidental to the furnishing of facilities to inspectors by the manufacturer will be eliminated. The saving effected thereby is expected to be about 10 per cent of the cost of the tools to the Associated Companies.

Arrangements have accordingly been made with the manufacturer covering the furnishing of shovels and digging spoons corresponding in quality and workmanship to their

"Extra Grade" product and in shape with our standard designing. Furthermore, the manufacturer will give us a contract or guarantee which covers the replacement free of charge of any tools which fall below trade standards for the best grades of shovels and digging spoons with respect to workmanship or quality of materials.

In view of these arrangements and savings to be obtained thereby, Specifications No. 3011 for long handled shovels and Specifications No. 3012 for digging spoons are hereby made obsolete.

For the convenience of your plant forces in ordering the proper size and shape of tools for their work, I am sending you herewith copies of the drawings which will be sent to the manufacturer covering the standard designs of shovels and digging spoons. Three of these drawings, Nos. 38-Y-1313, 38-Y-1314 and 38-Y-1316 show the sizes and shapes of shovels and digging spoons formerly covered by Specifications Nos. 3011 and 3012. A new drawing, No. 38 Y-1315, has been added covering an 8-foot straight shovel for use in light sandy soil which is practically free from rocks. This type of shovel will easily remove the top soil and, as the hole progresses, it may be used instead of a digging bar or slick to loosen the dirt, which is then removed with the digging spoon.

In order to aid the manufacturer, shovels and digging spoons should always be ordered by the drawing number.

Yours truly,

Vice President and Chief Engineer.

Attached:

Copies of Drawings
38-Y-1313
38-Y-1314
38-Y-1315
38-Y-1316

Subject: No. 493-B Peg Count Register Key.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY
Telephone and Telegraph Building
195 Broadway

New York October 28, 1921.
G. E. C. No. 1095
Replacing G. E. C. No. 808.

Dear Sir:

The No. 493-A key, which is described in G. E. C. No. 808, "Peg Count Register Key" and mounts in the nosing of the key-shelf, is provided with a button having an overhanging top. With this construction and location of the key it has been found that the sleeves of the operators' dresses occasionally catch on the button and become torn.

The Department of Development and Research in conjunction with the Western Electric Company has investigated the question of overcoming this objection and has found that the difficulty can be eliminated by employing a modified button and escutcheon plate. A new key employing these details has, therefore, been standardized and has been coded the No. 493-B. It will be noted from the attached drawing that the diameter and height of the embossed opening in the escutcheon plate have been increased as well as the height of the button. With these changes the shank of the button is entirely surrounded by the escutcheon plate.

The modified details have been arranged so that they can be added readily to keys already in service but it is recommended that existing keys be modified only where it is believed that the trouble experienced has been sufficient to warrant the change. The details should be ordered separately for this purpose by specifying the piece-part numbers listed below.

It should be noted that the shank of the new button is split or slotted the same as the present button. Before the button is assembled on the key plunger the two halves of the shank should be pressed together with a pair of pliers so as to secure a tight fit on the plunger and prevent the loosening of the button in service. To facilitate mounting the key, the Western Electric Company in the future will increase the

size of the hole in the keyshelf nosing to 9/16", thus permitting the key to be mounted without first removing the button. This method of mounting the key is shown on the attached drawing.

The Western Electric Company has advised that the price of the new key will be the same as the No. 493-A and that the piece-part numbers of the details and their prices when ordered separately will be as follows:

	Piece-Part Number	Price
Modified Escutcheon Plate	P-162434	$0.10½
Modified Button	P-162435	$0.18½

The above parts for use in modifying existing keys are now available. The complete key will be furnished with new switchboard equipments and on orders for the No. 493-B key starting this month.

Yours truly,

Vice President and Chief Engineer.

Attached:

Drawing No. 38-Y-1232.

CITY EXHIBIT 128-C

VOL. III.

GENERAL ENGINEERING.

(Letterhead)

Furnace Shield

AMERICAN TELEPHONE AND TELEGRAPH COMPANY.

New York, January 14, 1920.

G. E. C. No. 929.

Dear Sir:

I am sending you herewith a copy of Drawing No. 46-M-10, "Furnace Shield." This shield is intended for use with splicers' furnaces, where it becomes necessary to protect the flame from the wind.

The shield consists of three galvanized sheet steel panels, which are reinforced on the edges by steel wire. The panels are joined by means of strap hinges, so that they can either be folded flat on themselves or opened to any desired position.

By placing the shield on the windward side of the furnace,

with the three panels in the form of an open square, ample protection is afforded the flame, and the open side permits of ready access to the essential parts of the furnace whenever adjustment is necessary.

This material will be available within a reasonable time and may be ordered in accordance with the above drawing.

Yours truly,

CHIEF ENGINEER.

Attached:
Copy of Drawing
No. 46-M-10.

(Letterhead)

Supply of Types F, G and U Cables.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY.

New York, March 15, 1920.
G. E. C. No. 946.

Dear Sir:

Difficulty is being experienced by the Western Electric Company in producing a sufficient quantity of types F, G and U silk and cotton insulated cables principally on account of a temporary inadequacy of the supply of silk used in insulating these cables.

In order to relieve this situation we have authorized the Western Electric Company to substitute in types G and U cables (Specifications Nos. 3651 and 3652) untinned conductors, insulated with black enamel and two wrappings of cotton in place of the tinned conductors insulated with two wrappings of silk and one wrapping of cotton as covered by the present specifications, if it becomes necessary, in order to insure adequate output of these cables. The tin is omitted from the enameled conductor because the special tinned wire to be enameled is difficult to obtain at this time. This substitution will apply only to the present emergency and will not result in any impairment of the service. No change is contemplated at present in type F cable (Specifications No. 3650.)

From an installation standpoint the principal change to be noted is the use of enameled wire. Precaution should be taken in removing the enamel to insure good connections when the wires are spliced or terminated.

Yours truly,

VICE PRESIDENT AND CHIEF ENGINEER.

(Letterhead)

Transmitting Specifications No. 4006—Transportation Glass Insulators.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY.

New York, April 6, 1920.
G. E. C. No. 951.
Replacing in Part Specifications
Nos. 3001-3036.

Dear Sir:

I am sending you herewith one copy of Specifications No. 4006, "Transposition Glass Insulators." These specifications replace those parts of Specifications Nos. 3001 and 3036 which relate to transposition insulators, and, as the remaining portions have previously been replaced, those specifications are now obsolete.

The insulators covered by the new specifications are essentially the same as those obtained under Specifications No. 3001 with the exception that minor changes have been made in the dimensions and gauging requirements. These modifications were found desirable in manufacturing the insulators and do not affect their use.

Yours truly,
VICE PRESIDENT AND CHIEF ENGINEER.

Attached:
Copy of Specifications
No. 4006.

Transmitting Specifications and Drawings for B, C, and D First Aid Kits.

(Letterhead)

AMERICAN TELEPHONE AND TELEGRAPH COMPANY.

New York, May 17, 1920.
G. E. C. No. 956.

Dear Sir:

In G. E. C. No. 830, transmitting the preliminary draft of Specifications No. 4018, First Aid, we referred to the work we were doing in connection with the standardization of three types of First Aid Kits and suggested the field of use of each type of kit.

The specifications and drawings for the articles making up the B, C and D First Aid Kits have been prepared in final

form having been modified somewhat to meet certain manufacturing methods. Copies of these specifications and drawings are being sent to you under separate cover. Because of the multiplicity of details involved in the manufacture, the Western Electric Company states that it will not be in a position to supply all of the articles covered by these drawings and specifications until about 4 months after the date of this circular.

In the tables attached I am recommending wordings for requisitions for the various articles of the kits, and am giving prices quoted by the Western Electric Company. The prices quoted may fluctuate somewhat with market conditions and do not include the usual Western Electric Company's service charge. The prices of the articles are quoted in lots of 5000 and 1000. The Western Electric Company is of the opinion now that its original orders to the various manufacturers of the different articles will be in lots of 5000 or more. It may be necessary in connection with later orders to order in lots of 1000.

B. First Aid Kit. It is our opinion that for use in our work the B First Aid Kit has several decided advantages over the commercial kits now on the market because:

(a) The articles contained in the kit have been very carefully selected so that only those actually required in connection with telephone first aid work are included.

(b) The method of applying each type of article packed in a cardboard container is illustrated on the container itself rather than in a book of instructions. With this arrangement no time is consumed in the excitement of an emergency in obtaining information as to just how the article is to be applied.

(c) Any type of article can be removed from the kit without disturbing the other types.

(d) The uniform size of the containers for the articles, the plainly marked and colored labels, and the decalcomania affixed to the inner box cover showing the "Arrangement of Contents," all tend to keep the articles properly placed in the kit and in consequence readily available in case of an emergency.

(e) Because of all these features the individual responsible for the kit can see at a glance when any item is lacking and thus automatically reasonable assurance is provided for the replenishment of the supply.

C and D First Aid Kits. With the exception of the compresses which are packed in small envelopes, the remaining articles of the C and D First Aid Kits are each packed in a small waxed paper tube suitably labeled. A convenient means of quickly removing the articles from the tubes is to push them out with the pointed end of a pencil so that they may be grasped.

Both the C and D kits carry declacomania affixed to the inner sides of the box covers showing the proper arrangement of the contents.

Assembling. Because practically all of the different types of articles of the kits are made by different manufacturers, we found that it would be impracticable to ship a portion of all of these articles to one central point for assembling the kits and to ship the remainder to various points to care for the replacement requirements of the Associated Companies. It was therefore decided to propose to the Associated Companies that each item making up the kits be requisitioned separately and that the initial assembling be either done at the storeroom of the Associated Company or by the individual responsible for the kit. The decalcomania in the boxes, will, we feel, be an adequate guide to insure proper assembling.

Disbursing. You will notice that the articles packed, one per package in the C and D First Aid Kits are exact duplicates of those packed in greater quantities in the B kit, and in replenishing the supply of these articles of the B kit before all of the articles of a single container are used, it may be advisable in some cases to disburse the articles in the individual packages. They may then be removed from the tubes out on the job and placed properly in the cardboard container requiring replenishment.

Yours truly,
VICE PRESIDENT AND CHIEF ENGINEER.

Attached:
2 Tables.
Under Separate Cover:
Specifications Nos. 4075 to 4096 inclusive.
Drawings Nos. 94-E-83, 94-E-84.

Magneto Subscribers' Sets Employing 2500-ohm Ringers of the No. 8 Type.

(Letterhead)

AMERICAN TELEPHONE AND TELEGRAPH COMPANY.

New York, May 5, 1920.
G. E. C. No. 959.

Dear Sir:

The Western Electric Company have accumulated a considerable quantity of 2500-ohm ringers which they have bought from the Associated Companies under Plan No. 2—Returned Apparatus. These ringers can be used satisfactorily on lightly loaded magneto lines where 1000-ohm ringers are ordinarily used and can be repaired at a cost which will permit the subscribers' sets in which they are used being sold at a lower price than new sets equipped with 1000-ohm ringers. It has therefore seemed advisable to authorize the Western Electric Company to employ the 2500-ohm ringers now on hand, and those bought from the Associated Companies in the future, in new sets of the 315-H and 317-AH types. These sets will be coded 315-HB and 317-AHB (the letter B being added to the code to designate the 2500-ohm ringers) and it is recommended that they be adopted as equivalents to the standard 315-H and 317-AH sets.

The 315-HB and 317-AHB sets may be used interchangeably on the same line with 1000-ohm ringer sets under the line conditions given in Section 8 of Handbook Specifications No. 3851. While the volume of ring from the 2500-ohm ringers under these conditions will be somewhat less than from 1000-ohm ringers, the minimum ring will be as good as that obtained from No. 38 type ringers under the most severe conditions given in Section 8 for 2500-ohm ringer sets.

Section 8 states that 1000-ohm and 2500-ohm ringers should not be used on the same line, the reason for this being primarily that if 1000-ohm ringers were used on lines requiring 2500-ohm ringers, the effect would be to seriously reduce the ringing of the 2500-ohm ringers. As referred to in the preceding paragraph, the ringing of the 2500-ohm ringers on lines normally using 1000-ohm ringers is considered satisfactory and the requirement in Section 8 will be modified as regards the 1000-ohm sets at the first opportunity.

The Western Electric Company advises that the price of the 315-HB set will be $6.50 each and the 317-AHB set $7.60 each. These prices are 45 cents each less than the present pri-

ces of the 315-H and 317-AH sets. The Western Electric Company also advises that, in view of the outlet provided for the returned 2500-ohm ringers, the major and minor repair allowances on them will be continued. The effect of this is to make a total saving of 90 cents on each ringer requiring major repairs and $1.17 on each ringer requiring minor repairs sold to the Western Electric Company in the future.

It will be of assistance to the Western Electric Company if they are permitted to furnish the 315-H and 315-HB and the 317-AH and 317-AHB sets interchangeably on orders. I would accordingly suggest that arrangements be made with the Western Electric Company so that either set may be furnished unless the orders specifically state that the 315-H and 317-AH sets should be furnished.

Yours truly,
VICE PRESIDENT AND CHIEF ENGINEER.

Thimble Guy Rods.

(Letterhead)

AMERICAN TELEPHONE AND TELEGRAPH COMPANY.
New York, May 13, 1920.
G. E. C. No. 961.

Dear Sir:

I am sending you herewith a copy of the preliminary draft of Drawing No. 46-L-48 covering Thimble Guy Rods. The eye of this rod has been designed so as to provide sufficient curvature and bearing surface for the guy strand without the use of a separate thimble. This change has been made in order to overcome two sources of trouble experienced with the present construction, namely, the displacement of the thimble and the crushing of the thimble that occurs under heavy strains. The elimination of the thimble results in a decrease in the time required for installation, as there is no part of the rod to become displaced resulting in delay in the operation of pulling up the guy strand, also undesirable sharp bends in the strand due to the crushing of the thimble are avoided.

Approximately 2000 of the Thimble Guy Rods have been successfully used by one of the Associated Companies and they have been found satisfactory for guying and preferable to the present guy rods and thimbles.

At present the $\frac{5}{8}$" rod which is shown on the attached drawing is the only size for which dies have been made. The $\frac{1}{2}$", $\frac{3}{4}$" and 1" Thimble Guy Rods, are being developed and a General

Engineering Circular will be issued standardizing the use of this new rod in all sizes. In order that the $\frac{5}{8}$" guy rod may be put into use in the plant while the details of the $\frac{1}{2}$", $\frac{3}{4}$" and 1" rods of this pattern are being developed, arrangements have been made for the manufacture of the $\frac{5}{8}$" rod and they may be obtained on requisition, by ordering them in accordance with Drawing No. 46-L-48.

If you require additional copies of this drawing we will be glad to send them to you.

Yours truly,
VICE PRESIDENT AND CHIEF ENGINEER.

Attached:
Copy of preliminary
draft of Drawing
No. 46-L-48.

CITY'S EXHIBIT 128-D.

VOL. IV.

GENERAL ENGINEERING.

Subject—Carrying Case for Protector Blocks.

June 25, 1920.
G. E. C. No. 977.

Dear Sir:

The Department of Development and Research in conjunction with the Western Electric Company has developed a case for carrying protector blocks between local storerooms and substations or other places at which the blocks are to be used. The purpose of this device is to provide a convenient means for carrying the blocks and one which will protect them from injury.

The carrying case was developed primarily for carrying Nos. 26 and 27 protector blocks, but is also suitable, if desired, for the Nos. 19 and 20 and Nos. 1 and 2 protector blocks assembled with their micas. Its capacity is 18 open space cutouts, that is, protector block equipment for 18 wires.

The case has been coded as "No. 3-A Carrying Case." It consists of a rack equipped with springs whereby the protector blocks are held in assembly as if in the protectors and a metal cover into which the rack slides. The cover is equipped with a guide for the rack and with a spring to hold the rack in the closed position or in any partially opened position.

From experience obtained with similar boxes, we recom-

mend that these carrying cases be equipped with protector blocks in the local storerooms and suggest the desirability, at the larger storerooms particularly, of maintaining a sufficient supply of cases to permit of giving each man, in place of the case which he turns in and which may or may not contain some new blocks, a case with a complete supply of new blocks. This procedure will allow storeroom employees to do the work of filling the cases in non-busy periods.

We have previously suggested that Nos. 26 and 26 protector blocks which have been removed from service as defective be not discarded at the substations but be returned to some central points for disposition. To provide for the return of these blocks, it is suggested that the first two block positions on one side of the rack be left vacant. This will provide for placing the defective blocks in the carrying case as they are removed from the protectors and ordinarily two vacant spaces will be left between the good and defective blocks in the case. At the time of changing the blocks, the sequence of operations would seem to be to remove one set of defective blocks from the protector which would be placed in the rack followed by the removal of a new set of blocks from the rack for installation. With this sequence, there will always be at least one vacant position so that it should be possible for the employees to readily distinguish at all times between the new and defective blocks by the one or two vacant spaces.

If the practice of starting with the first two positions on the left side of the case vacant is adopted and the new blocks are removed first in the direction of the back of the case and then from the back to the front on the right side, it should be evident to the storeroom employees what blocks are defective and what new. It would seem desirable, however, to set up some routine for the inspection of all blocks returned in the carrying cases before they are used for refilling cases to insure that only blocks which have not operated are reissued to the plant forces.

Yours truly,

VICE PRESIDENT AND CHIEF ENGINEER.

Attached:
Photograph of No. 3-A
Carrying Case.

Discontinuing Specifications No. 2770.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

Telephone and Telegraph Bldg.
195 Broadway

New York, July 21, 1920.
G. E. C. No. 985.

Dear Sir:

In 1906 we issued Specifications No. 2770, "Instructions for The Maintenance Inspection of Crossarms and Guying" based on the methods of construction employed at that time. Subsequent developments have so altered the construction practices then in use as to make Specifications No. 2770 obsolete.

Specifications recently issued together with those soon to be issued will completely cover the subject matter contained in Specifications No. 2770.

Yours truly,
VICE PRESIDENT AND CHIEF ENGINEER.

Subject: Substation Installation—Improved Inside Wiring Nail.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

Telephone and Telegraph Bldg.
195 Broadway

New York, August 27, 1920.
G. E. C. No. 987.

Dear Sir:

A new nail for fastening substation wires has been developed and tried out by several of the Associated Companies. The results have been satisfactory and the following advantages which the new nail possesses make its use desirable:

1. The head of the new nail is not broken off in driving as easily as the head of the milonite nail.
2. The new nail is made in the standard ½ inch and ¾ inch lengths. The Shank of the ½ inch nail has a smooth finish which makes it easier to drive into hard wood than the milonite nail with coated shank. The ¾ inch nail has a coated shank to obtain the desired holding power on plastered walls.
3. In connection with removing station installations the new nail is preferable to the milonite nail in case it

should inadvertently be left in place with the head removed as only a small round head is exposed, while with the milonite nail two sharp metal prongs are exposed.

The Western Electric Company advise that the present prices of the new nails with both the standard olive green head and the white head, used with white wire, are as follows:

½ inch nail—$1.11 per M.
⅞ inch nail—$1.16 per M.

These prices are based on nails packed in containers of 100 each with 10 containers packed in a carton to make a unit package of 1,000 nails, and are subject to the usual service charge.

The Western Electric Company further advises that the manufacturer of the new nail is prepared to make deliveries in considerable quantities, but that it will probably be some time before he is in a position to meet the entire demand. It is, therefore, suggested that the Western Electric Company be authorized to supply both the new and old nails pending increased production of the new type. The new nails should be designated as Inside Wiring Nails.

I am sending you some samples of the new nails for your information.

Yours truly,
VICE PRESIDENT AND CHIEF ENGINEER.

Under Separate Cover:
Samples of ½ inch
and ⅞ inch nails.

Subject: Ground Rods.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

Telephone and Telegraph Bldg.
195 Broadway

New York, December 13, 1920.
G. E. C. No. 1000
Supplementing G. E. C. No. 650.

Dear Sir:

I am sending you herewith a copy of Specifications No. 4126, "Ground Rods," which replaces Specifications No. 3799, transmitted with G. E. C. No. 650.

These specifications include a requirement that the driving end of the rod and the surface adjacent to it shall be free

from tin or solder. This change is made so as to eliminate the hazard of particles of tin or solder being dislodged while the rod is being driven and causing injury by flying into the workman's face.

Also, the letter designation for the rod with the 18" terminal wire has been changed from "A" to "S" to avoid any confusion which might result when ordering rods.

Yours truly,

VICE PRESIDENT AND CHIEF ENGINEER.

Attached:
Specifications No. 4126.

Subject: Standard Operators' Chairs.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

Telephone and Telegraph Bldg.
195 Broadway

New York, December 1, 1920.
G. E. C. No. 1002
Replacing G. E. C. No. 752
Replacing G. E. C. No. 628

Dear Sir:

Due to the abnormal conditions during the past few years, the Western Electric Company has found it necessary to purchase operators' chairs from several sources instead of from one manufacturer as was formerly the practice. With the combined output from the several chair companies it is believed that the requirements of the Associated Companies will readily be met.

With the chairs being supplied from different sources, however, it is thought that the detailed requirements which should be met in all cases should be clearly set forth in order to insure a satisfactory and uniform product. I am attaching Drawing No. 138-A-40, "Standard Operator's Chair," which gives all principal dimensions, with limits, and covers the essential requisites regarding the finish of the chairs, and the kind and grade of material to be used in their construction.

In regard to the finish of the chairs, it is to be noted that the requirements only, rather than the exact methods to be employed in meeting these requirements, are given, since it is recognized that considerable latitude must be allowed in this matter in view of the widely varying conditions encountered in materials and manufacturing methods. The mahogany fin-

ished chairs, like a large majority of those furnished in the past, will match the Western Electric Company's No. 104-M finish. Although chairs with a finish somewhat lighter than this, matching more closely the standard No. 105-A switchboard finish have at times been ordered by a few of the Associated Companies, it is thought that the darker finish will in general be found more satisfactory because of the more uniform shade possible to obtain with it on the various kinds of wood employed. Standard oak chairs will be furnished to match the Western Electric Company's No. 103-C finish.

A few minor changes, noted below, have been made in the construction of the chairs along the lines of standardizing and improving their design.

It was thought at one time that a 4-inch rather than an 8-inch socket casting should be used on the 18-inch chairs, since the longer casting projected below the vertical portion of the legs as formerly made, and presented an unsightly appearance. For this reason the 4-inch socket was standardized for 18-inch chairs in General Engineering Circular No. 752, "1916 Standard Operator's Chair." Iit has since been found, however, that it is practicable to bend the legs of the small chair on a short radius so that their vertical portions extend far enough downward to hide the 8-inch socket completely from view, and since it is of a manufacturing advantage to standardize one size of socket for all chairs, the standard 18-inch chairs will in the future be furnished with 8-inch socket castings.

The method of supporting the foot rung on the 20-inch chairs by means of blocks mounted on the legs, as shown on the Western Electric Company's Drawing ES-180580 transmitted with General Engineering Circular No. 752, was adopted, since it had been found difficult to bend rung supports of the type used on the larger chairs so that they would properly fit the 20-inch chairs. This difficulty has been overcome, however, and it is now possible to furnish chairs of this size fitted with the bent supports, and all such chairs will in the future be constructed in this manner.

The method of supporting the foot rung on the 18-inch chair by mounting it directly on the chair legs, as standardized in General Engineering Circular No. 752, is retained. In the past the foot rungs of some of the 18-inch chairs have been planed flat on the bottom. Since this feature does not add materially to the stability of the rung, but rather decreases

its strength and involves unnecessary labor, the runs for all standard chairs will in the future be of round cross-section, as indicated on the attached drawing.

As standardized in General Engineering Circular No. 752, the foot rung on the 24-inch chair is placed at a height of 10 inches instead of 9½ inches from the floor in order to provide sufficient clearance between the rung and the switchboard foot rail in those cases where the height from the floor to the foot rail on No. 9 and No. 10 switchboards is greater than normal due to leveling of the switchboard to care for irregularities in the floor. As standardized in General Engineering Circular No. 628, "Operators' Chairs," rung heights of 5½ inches and 13½ inches for the 20-inch and 28-inch chairs respectively are also retained.

As standardized in General Engineering Circular No. 628 the height of chair for use with switchboard platforms is 20 inches.

The lengths of the spindles for the various sizes of chairs have been so fixed that the recommended vertical ranges of adjustment of the seats previously given, namely, 4 inches for the 18 and 20-inch chairs, and 7 inches for the 24 and 28-inch chairs, are obtainable, while sufficient stability for the seat when at the highest point of the recommended range is also afforded.

The top inner edge of the seat frame will be slightly chamfered on all standard chairs as a precaution against cutting the cane seat, a trouble which has sometimes resulted from the square edge heretofore allowed to remain on the frame.

General Engineering Circular No. 628 standardized 16 inches and 14 inches respectively, as the height of back and width of back for all sizes of chairs, and these dimensions are retained. A height of less than 16 inches for the back does not give proper support when the chair is occupied by a tall operator, and with a width of more than 14 inches for the back there is not always sufficient clearance between chairs used at points where there is a relatively sharp turn in the line of switchboard.

In order to facilitate ordering and shipping, it has been decided to assign code numbers to the standard chairs. A scheme has been adopted whereby each number is descriptive of the chair to which it applies, such as O-24 for the 24-inch oak finished chair and M-20 for the 20-inch mahogany fin-

ished chair, etc. The code number will be stamped in $\frac{1}{4}$" characters by means of a steel die at the top of one of the four legs of the chair.

Yours truly,
VICE PRESIDENT AND CHIEF ENGINEER.

Enclosure:
1 copy of Drawing
No. 138-A-40, Issue 3.

CITY'S EXHIBIT 128-E.

VOL V.

BUILDINGS.

Conferences attended by members of the Illinois Bell Telephone Company and Engineers of the General Engineering Staff of the American Telephone and Telegraph Company on Building Matters from January 1, 1920, to November 30, 1921, were as follows:

(1) Mr. C. A. Berry, a member of the General Engineering Staff of the American Telephone and Telegraph Company, visited Chicago on March 20 and 22, 1921, to confer with us on plans for taking care of Central Office after expiration of lease on quarters in Title and Trust Building.

(2) Mr. R. L. Young and Mr. C. A. Berry, members of the General Engineering Staff of the American Telephone and Telegraph Company, conferred with our engineers in Chicago regarding power service for operating machine switching equipment in Franklin Building on February 11, 1921.

Information as follows relating to Building Matters was received in correspondence by the Engineers of the Illinois Bell Telephone Company from the General Engineering Staff of the American Telephone and Telegraph Company from January 1, 1920, to November 30, 1921:

(1) Recommendations regarding type and kind of gloves to provide in connection with fire fighting equipment in central offices received in letter dated November 11, 1920.

(2) Recommendations regarding apparatus required for fire protection in machine switching offices received in letters dated December 29, 1920, and January 24, 1921.

(3) Recommendations regarding fire prevention equipment to be supplied cable splicers when installing building cables and private branch exchange switchboards received in letters dated April 28, 1921, and August 30, 1921.

(4) Information concerning water supply for standpipe system and summary of points brought out in conference in New York received in letter of November 11, 1920, and other letters of June 11, 1920, and July 20, bearing on the same subject.

(5) Letter dated July 9, 1921, concerning the matter of standardizing coffee urns was received.

(6) Letters dated December 27, 1920, and April 9, 1921, concerning Chicago laws or ordinances regulating or affecting the size of building were received.

(7) Letters dated March 22, 1921, and April 7, 1921, concerning artificial lighting in terminal rooms, were received.

(8) Letters dated September 27, 1921, and November 21, 1921, concerning symbols and legends used by us for indicating electrical equipment on building plans were received.

Recommendations regarding use of acid-proof mastic floor in battery rooms received in telegram of August 12, 1921, and letters of August 18, 1921, and October 10, 1921.

(9) Letters dated September 28, 1921, and November 7, 1921, concerning window screens for buildings housing machine switching equipment were received.

(10) Information concerning use of paints with turpentine content for use in decorating walls of switch rooms received in letter of June 7, 1921.

(11) Information concerning compressed air painting machines received in letter of October 17, 1921.

(12) Recommendation regarding omitting painting the concrete floors of the Franklin Building before installing machine switching equipment received in telegram of June 10, 1921.

(13) Telegrams dated July 6, 1920, concerning treatment of assembly room floor of Franklin Building was received.

(14) Information concerning plans proposed for taking care of Central Office after expiration of lease on quarters in Title and Trust Building received in letters of March 27, 1920, April 5, 1920, and telegram of March 15, 1920.

Comments regarding equipment floor plans for Wentworth office received in letters of June 18, 1920, and July 2, 1920.

(15) Information concerning construction details of new buildings for Wentworth and Oakland offices received in letters dated July 9, September 9, 1920, and October 7, 1920, and telegram of September 24, 1920, with suggestions for fire tower arrangements for Oakland and Wentworth buildings and rolling steel shutters for basement windows of Oakland Building.

(16) Letters concerning recording of humidity or atmospheric moisture conditions received in letters of March 23, 1921, July 29, 1921, and September 26, 1921.

(17) Information concerning power service for operating machine switching equipment in Franklin Building, received in letters of February 17, 1921, and July 21, 1921, also letter of March 4, 1921, concerning this matter.

CITY EXHIBIT NO. 128-F.

VOL. VI.

COMMERCIAL CIRCULARS

COMMERCIAL CIRCULAR NO. 116
Directory Specifications
Supplementing Circular Letter No. 100.

(Letter-Head)

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

New York, April 24, 1920.

Dear Sir:

Since the issuance of Circular Letter No. 100, Subject: "Directory Specifications" we have made certain experiments with type faces looking toward a still more economical set-up and now recommend that pages be set in the style illustrated by the page attached. This set-up, we think, is as satisfactory from the standpoint of appearance and legibility as that according with the specifications covering four-column pages attached to Circular Letter No. 100 and it is substantially more economical.

The difference between the two pages is that in the page attached, Mergenthaler 6 point No. 11 with Gothic Condensed No. 4 type set solid is used instead of Mergenthaler 6 point

No. 11B with Gothic Condensed No. 4B type leaded ½ point. The resulting saving in space which amounts to about 8½% is illustrated by the blank space in the fourth column, the text of this page being identical with that of the four column page illusrated in Circular Letter No. 100.

The type face used in the attached page is slightly less condensed than that used in the four column page of Circular Letter No. 100 and in our judgment legibility is sufficiently increased to offset the lack of leading. The comparative legibility of the two pages is a very close question. Each type of page has given satisfactory results in actual practice. The principal factors to be considered in determining which fact to use in any case are (1) necessity of conserving space, (2) cost, (3) printers' equipment, (4) legibility.

In conclusion it should be stated that the type face herein discussed is equally suitable for 3 column directories although in general there does not seem to be the same necessity for conserving space as is the case with four column books.

Yours truly,

C. I. Barnard,
Commercial Engineer.

Enclosure:
Specimen Directory Page.

Circular Letter No. 125

Cost of Composition for Style Recommended for Mechanical Operation.

July 30, 1920.

This letter sent to regular C. L. Mailing List.

Dear Sir:

It has come to our attention that in several instances printers who have been asked to bid on directories set in the style recommended for mechanical operation, have raised their prices for composition considerably, on the ground that the linotype work is rendered more difficult.

This letter is to advise you that we are at present working on a method looking toward simplification of the linotype work without in any way changing the appearance of the printed page.

We are not yet in a position to know whether the method under experiment will be successful, but suggest that if possible, the obtaining of bids on directory work be deferred

for the time being or at least that the matter of composition cost be kept open.

We expect to be able to advise you definitely in the near future as to the success or failure of the method now under consideration.

Yours truly,
(Stamped) C. I. BARNARD,
Commercial Engineer.

A True Copy MMc.

CIRCULAR LETTER No. 131

Linotype Work in Directory Page Set-Up Recommended for Mechanical Operation.

September 14, 1920.

Dear Sir:

The experimental work referred to in our Circular Letter No. 125, Subject "Cost of Composition for Style Recommended for Mechanical Operation," dated July 30, 1920, has now been completed and the scheme tried out. The results obtained in actual practice have proved entirely satisfactory.

Arrangements have been made with the Mergenthaler Linotype Company to carry in their stock special one-letter fonts of matrices of the capital letters of the 6 Point Gothic Condensed No. 4 type face recommended for directory composition in our Circular Letter No. 116, Subject: "Directory Specifications, Supplementing Circular Letter No. 100," dated April 14, 1920. The matrices for these capital letters are so made that they will run in practically the same channels of the linotype machine as the matrices of the 7 Point Gothic No. 13 type face described in our Circular Letter No. 105, Subject "Recent Developments in Linotype Equipment Used in Telephone Directory Composition" dated March 26, 1919.

These 6 Point Gothic Condensed No. 4 capital letters may be used for the dialed letters of the central office names in either three or four column directories in connection with the type faces specified in Circular Letters No. 100 and 116. By using this font of capital letters it is unnecessary for the linotype operator to make the additional shifts of the assembling elevator duplex rail which would otherwise be required in the change from Gothic to Roman, in the central office name.

This method of operation materially simplifies the composition and in fact renders it practically no more difficult than it would be for setting central office names in the style heretofore used. Accordingly this plan of composition should be

brought to the attention of your printer at the time arrangements are being made to reset directories to care for mechanical operation.

Printers can obtain the matrices and keyboard buttons required by ordering from the Mergenthaler Linotype Company in the regular way. Orders should call for:

Cap font of 6 point Gothic Condensed No. 4 one-letter and 23 combination key buttons, Part H-304, to run in connection with keyboard diagram No. 113-A.

Yours truly,

C. I. BARNARD,
Commercial Engineer.

COMMERCIAL LETTER NO. 138

Information Requested by Faulkner, Inc., Research Bureau.

(Letter-head)

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

New York, November 1, 1920.

Dear Sir:

The New York Telephone Company has recently received a letter from a concern known as Faulkner, Inc., located at Washington, D. C., and engaged in statistical research. This concern is apparently compiling, for national advertising purposes, a reference library in which will be incorporated data concerning all the principal cities of the United States. They have asked the New York Telephone Company to advise them of the number of telephones in use in Syracuse, the number per capita, to furnish them with a copy of the classified directory, and to give them the latest schedule of business and residence telephone rates, and they enclose, with their letter, a questionnaire form for listing the information which they request.

The New York Telephone Company has called this matter to our attention in view of the fact that it is apparently a national undertaking and one which will probably sooner or later touch all companies.

In order that you may be advised with regard to the activities of Faulkner, Inc., and may know what our attitude is with respect to furnishing the information which they request, I am attaching for your information a copy of the letter from Faulkner, Inc., to the New York Telephone Company and a copy of a memorandum stating our position in the matter.

Mr. J. D. Ellsworth, Advertising Manager, advises us that

this matter has been brought to his attention by the Publicity Departments of several of the Associated Companies. He has asked us to suggest to you that the Publicity Department of your company be advised of any action you may take with respect to the Faulkner request.

Yours truly,

Commercial Engineer.

Attached:
Copy of Letter
from Faulkner, Inc.
Copy of Memorandum
to New York Company.

October 26, 1920.

Memorandum for Mr. R. H. Gabay, General Commercial Engineer, New York Telephone Company.

With respect to the request of Faulkner, Inc. (statistical research), 644 Munsey Building, Washington, D. C., dated October 7, 1920, for information concerning telephone rates, development, and classified directory information, it appears that this opens up a question which is national in its scope. Although this is the first time that the activities of this concern have been brought to our attention, it appears from their letter that their activities are nation-wide, and that either all the other Associated Companies have been approached for similar information or will be in the near future. For this reason we feel that our attitude with respect to this case may be of general interest.

After considering the question it is our judgment that the attitude of the system with respect to furnishing the information requested by Faulkner, Inc., should be as follows:

(1) *Rate Information.*

Information concerning telephone rates is available to the public in conformity with the statutes of the various states through tariffs filed with rate regulatory bodies, and at general, and in some cases at public, offices of the telephone companies. While our tariffs are accessible and open to public scrutiny at all times, nevertheless we feel that we should avoid wherever possible the furnishing of such information to individuals or commercial concerns except as may be done in the operation of our own telephone business, for the reason that our rates are subject to change from time to time and therefore, unless we assume the considerable burden of forwarding data concerning rate revisions and changes, any data which we

may have given out becomes rapidly obsolete and misleading. In connection with the use which Faulkner, Inc., propose to make of the rate information which they request, we feel that to furnish them this information is particularly objectionable because of the fact that they propose to print it, and therefore it would be impossible to make corrections from time to time as rates and rate practices change. We cannot prevent or hinder Faulkner, Inc., securing the information which they desire from our published tariffs, but we cannot assume the responsibility of keeping them advised of our current rates.

(2) *Telephone Development.*

In general, the furnishing of information as to telephone development appears to be objectionable because development statistics are subject to constant change, and any given figures rapidly become out of date, and may result in misleading comparisons.

(3) *Classified Directories.*

There appears to be no objection to furnishing classified directories to Faulkner, Inc., where the telephone company publishes such directories itself. Where classified directories are published by commercial concerns for their own account, we believe that Faulkner, Inc., should be referred to such publishers. Where the telephone company furnishes directories for use other than in connection with its service, they should be charged for in accordance with regular practice.

On account of the national character which this request appears to assume, we are forwarding a copy of the request of Faulkner, Inc., together with a copy of this memorandum, to all Associated Companies.

Commercial Engineer.

COB/G

(COPY)

FAULKNER, INC.

664 Munsey Building,
Washington. D. C.

October 7, 1920.

New York Telephone Company,
Syracuse, New York.

Gentlemen:

We are compiling a very extensive REFERENCE LIBRARY of ten volumes, covering all the states and cities in the United

States, for circulation among the large national advertising agencies and concerns of the country. It has been designated as "The greatest contribution ever made to advertising literature."

It is our desire to have every city represented in a fair, impartial manner and especially regarding public utilities. We would, therefore, appreciate it very much if you would send us your latest schedule of rates for telephone service in your city, both residential and commercial.

We would also like to have you advise us the number of telephones in use, in your city; number per capita, and a copy of your classified directory. For this latter, we shall be very glad to send you whatever charge you consider necessary to cover cost and postage.

Self-addressed, stamped envelope is enclosed herewith for your convenience in replying.

Assuring you of our appreciation for any service you may render us and thanking you in advance, we are,

Yours very truly,

FAULKNER, INC.

(Signed) D. E. CAMPBELL,

Chief Statistician.

DEC:W
Copied by GMS

State, New York Request for Information Telephone &
City, Syracuse For Rates

SPACE BUYERS' REFERENCE LIBRARY

Published by

FAULKNER, INC., Washington, D. C.

We are compiling a very extensive Reference Library, in ten volumes, for the use of National Advertisers throughout the United States.

It is essential that our data should be accurate in every respect and we therefore request that you kindly assist us with information relative to

TELEPHONES AND RATES

as follows:

Name of Company.....

Telephones Installed ..... per capita rate: One for each ..... person

Residential Rate

Commercial Rate

(Signed) .....

A prompt return of this questionnaire will be greatly appreciated. We are enclosing a self-addressed, stamped envelope for your convenience.

FAULKNER, INC., Munsey Building, Washington, D. C.

CITY EXHIBIT 128G.

VOL. VII.

COMMERCIAL CIRCULARS.

COMMERCIAL CIRCULAR No. 4.

Classified Section Listings; Machine Switching Set-Up.

(Letter-head)

AMERICAN TELEPHONE AND TELEGRAPH COMPANY.

New York, January 4, 1921.

Dear Sir:

Attached is a specimen of classified section listings set in conformance with the requirements of machine switching. (See Mr. Gherardi's letter, dated May 1, 1920, subject: Proposed Standard Form Directory Listing.)

In this connection we wish to call your attention to the fact that in the specimen directory pages submitted with Mr. Gherardi's letter and with our Circular Letter No. 116, dated April 24, 1920, subject: Directory Specifications, Supplementing Circular Letter No. 100, a flat-top figure (3) was used by mistake. In the attached specimen a round-top figure (3) was used by mistake. In the attached specimen a round-top figure (3) has been used, corresponding to that used in our Circular Letters Nos. 100 and 102, subjects: Directory Specifications and Page Specification for Classified Sections of Directories, dated October 21, 1918, and November 29, 1918, respectively.

The flat-top (3) is apt to be confused with the figure (5) and for this reason we believe it is advisable to use the round-top (3). Hereafter the Mergenthaler Linotype Co. will include this style of (3) with all orders for fonts for telephone directory composition, unless otherwise specifically directed.

Yours truly,

C. I. BARNARD,
Commercial Engineer.

Enclosed: Specimen of Classified
Section Directory Listings.

CIRCULAR No. 9.

Clause on Service Application Card.

(Letter-head)

AMERICAN TELEPHONE AND TELEGRAPH COMPANY.

New York, May 7, 1921.

Dear Sir:

We have recently reviewed the subscribing clauses now appearing on the service application cards (sometimes known as the short form of contract) used by various Associated Companies. This review shows considerable variation and in some cases the clause does not appear to be entirely adequate.

Such a clause must necessarily be brief, because of the conditions under which it is used, and yet it must meet several important requirements. It is particularly desirable that the clause shall not only notify the applicant that he subscribes to the rates and regulations contained in the tariff as established at the date of the application, and to pay all charges in accordance therewith, but also to the rates and regulations of the tariff as they may thereafter be established. It is further desirable that the clause does not obligate the Telephone Company to furnish services under conditions and at rates other than as specified in the Tariff, either at the date of the application or subsequently.

These requirements of course limit the use of service application cards to services for which specific rates are quoted in the Tariff. Services which are not covered by the rates quoted in the Tariff must be provided for by special arrangements or contracts, which may be, however, in some instances supplemental to the service application card.

The following clause, which has been approved by our legal department, is recommended to all Associated Companies for use when introducing service application cards or when existing supplies are replenished:

"The undersigned requests the Alpha Telephone Company to furnish telephone service and equipment, as above specified and as may be ordered from time to time either orally or in writing, and agrees to pay all toll and other charges.

SUBJECT AT ALL TIMES TO LAWFUL RATES AND REGULATIONS.

.....

Applicant."

In printing this clause upon the service application card, it is suggested that the words, "Subject at all Times to Lawful Rates and Regulations," be in capital letters of the same face type as the text of the clause, and set, as indicated, slightly apart from such text and directly over the space designated for the applicant's signature.

Yours truly,

C. I. BARNARD,
Commercial Engineer.

LETTER No. 163.

Listing of 5 digit Telephone Numbers in Directories in Connection with Machine Switching Installation.

(Letter-head)

AMERICAN TELEPHONE AND TELEGRAPH COMPANY.

New York, March 15, 1921.

Dear Sir:

Traffic Circular No. 158, issued March 7, 1921, provides that in certain cases five-digit numbers will be used in connection with machine switching offices where none of the letters comprising the central office name will be dialed.

In such cases it seems desirable to list the five-digit number in the Telephone Directory with a dash following the first digit, for example 3-4567. On account of the fact that the first digit will be used as an office designation and manual operators will be required to use this digit in selecting proper call circuits or proper groups of dialing trunks, it is believed that the separation of the first digit from the remaining four by the use of a dash will encourage subscribers to pronounce telephone numbers with a pause following the first digit.

Yours truly,

C. I. BARNARD,
Commercial Engineer.

COMMERCIAL LETTER No. 164.

Bonding of Connecting Companies for Performance of Contract.

(Letter-head)

AMERICAN TELEPHONE AND TELEGRAPH COMPANY.

New York, March 8, 1921.

Dear Sir:

Commercial Letter No. 150, dated December 7, 1920, requested the opinion of the Associated Companies with respect

to the practice of requiring connecting companies to give satisfactory bond or security to insure compliance with the terms of connecting agreements. Substantially all of the companies have replied to this commercial letter, and the opinions given may be summarized briefly as follows:

"A substantial majority of the Companies feel that most connecting companies are prompt in their settlements, and generally live up to the terms of their agreements; that agreements are so worded that their enforcement is not a matter of difficulty; and that the requiring of bonds for performance would probably result in unnecessary hostility and loss of confidence.

Only two or three of the Associated Companies require bonds for performance of connecting agreements. These companies feel that bonding arrangements are proper under some conditions and have not thus far resulted in adverse reactions. The Company having the most such cases, however, states that it feels that it would never be necessary to require bonds in connection with more than five per cent of its connecting agreements, and in this case the agreement is so worded that the bonding requirement is optional. This company also states that in only one case has a connecting company required the Associated Company to give bond.

Most of the Associated Companies feel that if bonds are required, the premiums should be paid by the Bell Company, and the Bell Company should be willing to give its bond to the connecting company as an earnest of its good will and intention to perform under the contract.

One Associated Company points out that the average amount of bond required would be less than $400 and that such a bond is not attractive to regular bonding companies, whose requirements are elaborate and more or less rigid. This Company suggests that personal bonds might be more satisfactory in cases of this kind.

A number of the Associated Companies point out that even though it were our practice to require bonds where the credit of connecting companies was doubtful, only in a very few cases would it be necessary to enforce bonding arrangements.

One Associated Company suggests that arrangements be made with connecting companies to pay us each month in advance a certain amount (computed from the consideration of 12 months' business), which would be billed

to the connecting company as a routine matter each month, subject to payment in arrears of further amounts or allowances to complete each monthly settlement. This is substantially the same practice as is followed in connection with message service subscribers who pay us each month a fixed sum, plus the message adjustment for service rendered during the preceding month."

The consensus of opinion, as expressed in the replies of the Associated Companies to Commercial Letter No. 150, confirms us in our judgment that bonding arrangements to insure performance of contract by connecting companies are not necessary, would probably lead to hostility, would encourage connecting companies to believe that we were withholding our full confidence, and would be generally unsatisfactory. It is our recommendation that those companies who do not now require bonds for performance of connecting agreements, refrain at this time from setting up any arrangements of this type. It is also recommended that those companies which at the present time are requiring bonds for performance of contract, investigate the situation carefully with a view to discontinuing this practice, if opportune. These recommendations are based on the belief that the interests of the Associated Companies and of the connecting companies are mutual, and that good relations with connecting companies rest upon proper co-operative commercial effort.

This is written after conference with Mr. Hall and Mr. Gherardi.

Yours truly,

C. I. Barnard,
Commercial Engineer.

Commercial Letter No. 176.

Floor Managers for Large Commercial Offices.

(Letter-head)

American Telephone and Telegraph Company.

New York, May 19, 1921.

Dear Sir:

As a means of promoting harmonious relations with subscribers when visiting the commercial office, several companies have established "Floor Managers" in their larger offices, whose duties are to see that patrons are directed to the proper place to transact their business and that they receive the proper attention and service.

The floor manager stations himself in the lobby near the entrance and offers assistance to patrons entering the office. His usual method of approach is to step up to the patron and say, "Can I do something for you?" or some similar suitable phrase. After the patron has stated the nature of his business which he desires to transact, the floor manager says, "Will you step this way, please," and leads the patron to the proper place. If it is at the counter, he calls the counter clerk by name, introduces him and asks him to take care of the patron. If all of the counter men are busy he may call some other employee. When not directing incoming patrons the floor manager observes the quality of work at the counter or stands at the front of the office and asks patrons coming from the counter such questions as "Did you receive the proper attention?" "Were you properly taken care of?" "Is everything all right?" etc. If the attitude of the patron indicates that he was not fully satisfied with the treatment accorded him, the floor manager takes the patron to some one higher in authority, such as the unit manager, manager, etc. Effort is made to prevent any patron leaving the office dissatisfied.

The floor manager usually reports to the manager in charge of the office as a whole. He has no direct authority over the other employees in the office nor has he authority to transact company business with subscribers.

For the position of floor manager a man of good appearance and pleasing personality who is familiar in a general way with the company's business and policy is required. Furthermore it is of great importance that he be able to deal with the other employees of the office without arousing antagonism.

Careful explanation to all employees of the reason for the establishment of the position of floor manager will aid materially in promoting harmonious cooperation between the floor manager and other employees.

An arrangement such as above described should promote the giving of a high standard of commercial service. Where the plan has been in effect the public has been generally appreciative of the telephone company's efforts in the interests of subscribers. In one case the officials have received a number of letters from subscribers expressing appreciation of the service they have been accorded at the office.

It is suggested that this matter be given consideration in

connection with the larger commercial offices in your territory.

Yours truly,

C. I. BARNARD,
Commercial Engineer.

COMMERCIAL LETTER No. 197.

Two Suggested Modifications of Report Charge Practice.

(Letter-head)

AMERICAN TELEPHONE AND TELEGRAPH COMPANY.

New York, December 8, 1921.

Dear Sir:

Commercial Circular No. 12, dated July 26, 1921, outlined a change in the present report charge practice which was then under consideration and requested the comments of the Associated Companies as to its desirability. As the majority of the replies have been favorable to the change, it will be included in the Toll Operating Practice now in preparation by the traffic department.

Several companies suggested other modifications in the report charge practice and certain of these will also be adopted. There were two changes suggested, however, as to which we would like your comments. One relates to the discontinuance of the report charge on reports of "No Telephone Listed" and "Telephone Disconnected" and the other relates to person-to-person calls where the calling party upon being given a report that the called party is not available agrees to talk with "Anyone."

1. *Report Charges on Reports of "No Telephone Listed" of "Telephone Disconnected."*

Under the present operating practice report charges are collected throughout the greater part of the Bell System on reports of "No Telephone Listed" or "Telephone Disconnected." The New England Telephone and Telegraph Company does not attempt to collect report charges on reports of this nature, and the Southern New England Telephone Company does not collect report charges on reports of "Telephone Disconnected." The latter company reports that it is constantly having commercial difficulties in the application of report charges where there is "No Telephone Listed."

As far as the work done by the Telephone Company is

concerned, there is no difference between a station-to-station call and a person-to-person call where there is "No Telephone Listed" or the "Telephone Disconnected." In the case of a person-to-person call where a report of this nature is rendered, the calling party pays a report charge, although the information furnished is of little if any value to him. Moreover, if he had placed this call on a station-to-station basis, he would have received the same information without any charge being made. From the subscriber's point of view a report of "No Telephone Listed" or "Telephone Disconnected" might seem to correspond very closely with reports of "Busy" and "Don't Answer," for which no charge is made.

Discontinuing report charges on those two classes of reports would probably cause a considerable revenue loss which has been estimated roughly to amount to between $200,000 and $300,000 per year for the Bell System. Of course, this loss would be distributed between all the Associated Companies, and in making a decision for your company it will be necessary to balance the probable improvement in public relations against the loss in revenue. We would like to know what your experience has been in the application of report charges on reports of this nature, and it would also be of assistance if you will give us an estimate of the amount of revenue that would be lost if report charges were eliminated on these two types of reports.

2. *Report Being Rendered, Calling Party Agrees to Talk to Anyone.*

Under the present practice, when the calling party on receiving a report agrees to talk with "Anyone," a person-to-person charge is made if the call is completed, but it has been suggested that it would be more equitable if this were considered as two calls. A report charge would then be made on the original person-to-person call, and on the call for "Anyone" the station-to-station rate would apply. In certain cases the sum of the report charge and the station-to-station rate is 5 cents more than the person-to-person rate. On the other hand, the subscriber would be benefited in long conversations because of the difference in overtime rate, and he would also be able to make use of evening and night rates during the discount period.

Moreover, under the present practice, any subscriber who

understands the operating practice can secure the advantage of the lower station-to-station rate on calls of this nature. On receiving a chargeable report he can cancel the person-to-person call and then immediately afterwards place a new call for "Anyone" at the called station.

Of course, in cases where the report given the calling party states that the particular person can not be reached but that "Mr. Jones" is ready to talk, the person-to-person rates would apply if the call is completed.

There is perhaps some question as to the advisability of making a change of this kind in report charge practice as it might be an entering wedge toward further modification of the Classified Schedule. The suggested change would, however, probably appear logical from the subscribers' viewpoint. We would like to know whether you have experienced any commercial difficulties with calls of this nature which might warrant a change. We would also be glad to have your opinion on changing the charge on a call of this kind from a person-to-person charge to a report charge and the station-to-station rate.

We will appreciate it very much if we can have your comments on these two questions at your earliest convenience and if possible not later than January 1, 1922, as it is desirable that a decision on these matters be made at an early date.

Yours very truly,

C. I. BARNARD,
Commercial Engineer.

COMMERCIAL LETTER No. 200.

Circuits Connected to Radio Broadcasting Apparatus.

(Letter-head)

AMERICAN TELEPHONE AND TELEGRAPH COMPANY.

New York, December 27, 1921.

Dear Sir:

Several requests have recently been received by this Company and by certain Associated Companies for both exchange and toll facilities to be directly connected to radio telephone broadcasting apparatus. In only one case have facilities been furnished for this purpose, and in this instance a special contract was made which specified that the furnishing of the circuit was not to be considered as establishing a precedent and that the contract can be cancelled on five days notice.

The whole matter of radio telephone broadcasting is now under consideration and you will be advised as to the conclusions reached. In the meantime it is suggested that you refrain from making any arrangements permitting either exchange or toll facilities to be *directly connected* to radio telephone broadcasting apparatus.

If such facilities have been, or are now being, furnished by your company, we would appreciate your giving us the essential facts in connection with each case together with information as to any inquiries for such facilities you may receive.

Yours truly,

C. I. BARNARD,
Commercial Engineer.

CITY'S EXHIBIT 128-H.

VOL. VIII.

TRAFFIC CIRCULARS.

(Letter-head)

AMERICAN TELEPHONE AND TELEGRAPH COMPANY.

New York, January 7, 1921.
T. C. No. 153.
Supplementing T. C. No. 28.

Dear Sir:

It is important that on toll traffic routed over the longer circuits, special attention should be given both to obtaining efficient use of these expensive lines and also to the completing of a high percentage of the calls because of their high revenue value. This means that a more liberal provision of operators should be made for this traffic and the best way to accomplish this appears to be to increase certain toll operator load coefficients given in Traffic Circular No. 28, which comprehend average conditions as regards distribution of traffic by length of haul.

It has always been recognized that certain portions of the traffic are easier of handling and completion than the average and that on this traffic the standard operating loads could be exceeded, but that there were also conditions under which it was advisable to carry lower loads. With properly trained forces, proper distribution of traffic on the boards and assignment of operators to positions and with good toll central office management, it is entirely possible in most offices to

carry these standard loads and maintain good service and efficient toll circuit use. There are offices, however, where the amount of long haul traffic considerably exceeds the normal proportion. In order to meet this condition, we are providing a revised table of toll coefficients to apply on calls to points 200 miles or more distant from the originating toll center. The new coefficients are in all cases 50 per cent higher than the present coefficients as shown on pages 13-a and 13-b of Traffic Circular No. 28. This increase applies to the coefficients shown opposite items 1, 1-a, 1-b, 2-a, 2-b and 2-c in the tables of coefficients.

In order to make this increased allowance in the toll coefficients without disturbing the present equating system, it is planned to make the increase on the coefficients applying to outward single-ticket and two-ticket traffic, both direct and switched, and to both calls filed and delayed calls disposed of by modifying the weighted coefficients applying to the traffic of the office as a whole in accordance with the proportion of outward calls to toll centers over 200 miles from the originating toll center. The percentage of calls to these points may be derived once each year from the data used as a basis for engineering the toll circuits. The methods to be used in applying this increased allowance are covered on the attached sheet showing the new table of coefficients for equating toll traffic. This sheet should be inserted opposite page 13-a of Traffic Circular No. 28. Additional copies will be supplied upon request.

If practicable, we suggest that this new allowance be applied to the traffic of the January reports.

Yours truly,

VICE PRESIDENT AND CHIEF ENGINEER.

Attached:

Table of Revised
Toll Coefficients.

(Letter-head)

AMERICAN TELEPHONE AND TELEGRAPH COMPANY.

New York, February 2, 1921.
T. C. No. 155.

Dear Sir:

I am sending you herewith a set of instructions for attendants at No. 550-C private branch exchanges. Similar sets of instructions covering the operation of the No. 505-C and the No. 600-C types of private branch exchanges will be issued in the near future.

The operation of the new types of manual private branch exchanges designed for use with machine switching central offices, and, to a lesser extent, the operation of existing private branch exchanges modified for such use differs from the operation of private branch exchanges served by manual central offices in certain important features mainly in the dialing of central office calls by the attendant or the extension users, and in obtaining through supervision or control of central office connections directly by extension users. In order to insure satisfactory operation of these new switchboards immediately following the cutover, it is advisable that attendants be given personal and individual instructions prior to the cutover date. In the case of new No. 550-C switchboards installed some time prior to the cutover such instruction as is required to insure proper operation of the board while connected with the manual office should be given immediately following the installation. In all cases where new switchboards are installed and also where existing switchboards are modified instruction covering the proper operation of the board when connected with the machine switching central office should be given immediately prior to the cutover.

It has been the practice of some of the associated companies to issue pamphlets to P. B. X. subscribers giving instructions for the operation of the switchboard. It is our thought that the material set up in the sets of instruction attached, either included in pamphlets such as are already issued or set up in separate pamphlets, will supplement and emphasize the personal instruction given the attendants at the time of the cutover and will also provide them with a source of reference which may be of value when questions come up as to the proper method of operation. The written instructions are not intended to take the place of personal instruction.

In addition to instructions covering the method of operation most of the current pamphlets contain information relative to the use of proper phraseology, suggestions for extension users as to the proper method of placing calls from extensions and various items of information with reference to obtaining assistance from the Telephone Company in procuring attendants, reporting equipment in trouble, etc. If it is thought desirable to include this matter in the pamphlet to be issued just prior to the cutover in order to make up a more complete instruction book for the purposes of the P. B. X. subscriber, I would suggest an arrangement substantially as follows:

1. A paragraph or a number of paragraphs may be included as a foreword in the front of the book making reference to the value of courtesy and accuracy and also stating the position of the company relative to assisting the subscriber in the procuring of attendants and of cooperation with him generally in the way of furnishing telephone service.

2. The instructions for the operation of the switchboard may be supplemented by more detailed information relative to the method of handling various classes of irregular calls and relative to the use of proper phraseology, such as:

(a) Completing delayed calls.
(b) Methods of handling calls over private toll lines.
(c) Giving voluntary supervision.
(d) Repeating numbers.
(e) Giving precedence to the proper signals.

3. Following the attached instructions, suggestions applicable to P. B. X. extension users may be included covering the following points:

(a) Answering promptly.
(b) Answering by name.
(c) Calling by number.
(d) Remaining at the telephone when calling.
(e) Dialing instructions.

4. Other information such as the following might be appended:

(a) Reporting equipment out of order.
(b) Handling service complaints.
(c) Care of Equipment.

It does not seem advisable to cover the instructions for different types of P. B. X. switchboards in the same pamphlet. Such a pamphlet would provide each attendant with instructions irrelevant to the operation of her particular switchboard and would probably bring about some reaction in the way of creating a demand for certain types of switchboards in places where they are not needed or where it is inexpedient to furnish them at the time.

The attached sets of instructions include certain examples which are set up as being typical and should be modified to suit the conditions of the particular cities for which the pamphlet is being issued; for example, the telephone numbers given and the code numbers given under dialing instructions should be changed where necessary to apply locally.

I should be glad to receive any comments you may have as to the attached instructions and also as to the suggestions

given above relating to the methods of instructing attendants at new types of switchboards. I should like also to receive copies of any sets of instructions you may issue for this purpose.

Yours truly,
VICE PRESIDENT AND CHIEF ENGINEER.

Attached:

Copy of instructions for Attendants at No. 550-C P. B. X.'s when Connected to Machine Switching Central Offices.

(Letter-head)

AMERICAN TELEPHONE AND TELEGRAPH COMPANY.

New York, March 7, 1921.
T. C. No. 158.

Dear Sir:

With the introduction of machine switching operation, two new types of subscribers' numbers will come into general use. The first type will be numbers consisting of five digits without an office name and the second type will be numbers consisting of an office name and four numerals, the first one, two, or three numerals of which are zeros.

Where five digit numbers without an office name are used, in many cases both local "A" and toll operators will be required, in setting up conections to these numbers, to consider the first digit as the office name, using this digit to select either the proper call circuit or the proper group of dialing or ring-down trunks. It appears desirable, therefore, to adopt for use by the operating forces a system of repeating numbers which will tend to make the first digit stand out from the rest of the number, so that subscribers will gradually form the habit of giving such numbers in this manner. The plan for repeating numbers is worked out on this basis, and further this idea will be emphasized by listing numbers of this type in the Telephone Directory with a dash separating the first digit from the remaining four. This method of directory listing is covered in commercial letter No. 156 which is being sent out to each associated company.

In the case of numbers consisting of an office name and four numerals of which the first one or more are zeros, the same general plan for repeating numbers will be followed as that outlined in Traffic Circular 73 for numbers not begin-

ning with zero. The numeral zero will continue to be pronounced "Oh."

The proposed practice for repeating the different types of numbers is given in the following table:

NUMBERS CONSISTING OF FIVE DIGITS.

Directory Listing.	
5-1432	Repeat as Five - one four - three two?
6-0001	Repeat as Six - oh oh - oh one?
5-0023	Repeat as Five - oh oh - two three?
5-0178	Repeat as Five - oh one - seven eight?
3-2000	Repeat as Three - two thousand?
5-1300	Repeat as Five - one three - hundred?
2-4780	Repeat as Two - four seven - eight oh?
5-0300	Repeat as Five - oh three - hundred?

NUMBERS BEGINNING WITH ZEROS.

Directory Listing.		
Main	0004	Repeat as Main - oh oh - oh four?
Walnut	0028	Repeat as Walnut - oh oh - two eight?
Main	0375	Repeat as Main - oh three - seven five?
Cedar	0375-J	Repeat as Cedar - oh three - seven five J?

Yours truly,
VICE PRESIDENT AND CHIEF ENGINEER.

CITY'S EXHIBIT 128-I.

VOL. IX.

TRAFFIC CIRCULARS.

Subject: Telephone Repeaters—Operating Instructions.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY
Telephone and Telegraph Bldg.
195 Broadway.

New York, February 4, 1920
T. C. No. 132
Supplementing G. E. C. No. 812

Dear Sir:

Our attention has been called to the fact that investigations of transmission complaints by the field forces have dis-

closed many cases where the difficulties experienced were caused by repeater cords not being used on all calls requiring them. The information which we have indicates that this is due in some instances to the failure of the operators at the originating toll centers to pass the code R, and in others to the failure of the inward operators at the intermediate offices to appreciate the significance of this code. In other cases it was found that connections were being established without repeater cords when they were busy. It occurs to us that the failure to use repeater cords when required may be due also, to some extent, to the circuits not being properly marked to indicate their suitability for repeater use.

The number of repeater cords in service throughout the Bell System has been rapidly increasing and a greater dependence is being placed upon their proper use in the design of the toll line plant. This makes it essential that they be inserted in all connections requiring them if satisfactory transmission is to be obtained. It is suggested, therefore, that the various companies look into the matter of repeater cord operation with a view to correcting the conditions which seem to be the cause of some of the transmission difficulties that are at present being experienced. It would be well to make sure that the codes prescribed by the routing instructions are being passed and that their significance is understood, particularly by the inward operators; also to see that the repeater operators are reporting "NC" in case all the repeater cords or suitable circuits in the groups concerned are busy, instead of completing calls without inserting the repeater cords. In this connection the matter of suitable circuits being properly marked might well be given consideration.

It may be that the difficulties called to our attention are due in part to the fact that some of the companies have not adopted the plan of indicating when a repeater cord shall be used by incorporating in the routing instructions a code to be passed with each call. This plan was suggested in G. E. C. No. 812, and seems to us to be the one which will give the most satisfactory results, all things considered. If your company is not following the practices recommended or has experienced difficulties in attempting to follow them, I should like to be informed of the plan that is being used, together with the reasons why the suggested scheme does not appear to be applicable in your territory. I should also like to receive any suggestions you may have for modifying the plan which we

recommended, with such supporting information as may be available.

In G. E. C. No 812, certain load figures were given which, although not based on complete information, appeared suitable for use in determining repeater cord requirements. Since the issuance of that circular a number of the companies have had considerable experience in repeater cord operation, and it has occurred to us that some data may have been collected which would be of value in determining more exactly the load carrying capacities of repeater cords. In the event that your company has made any studies of this nature, I would appreciate it if you would send me such data as you may have obtained.

Yours truly,
CHIEF ENGINEER.
Traffic Circular No. 135

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

ENGINEERING DEPARTMENT

LOCAL TRAINING DEPARTMENT METHODS

Approved:

Copy No.

This book is the property of the American Telephone and Telegraph Company, and is charged to the employee to whom it is assigned. It shall be accounted for upon demand.

April 15, 1920.

A. T. & T. Co. Engaging Operators Div. 1, Sec. 4
Page 1.

REQUIREMENTS FOR INEXPERIENCED APPLICANTS

1. *Character.*

The most stringent requirement regarding applicants is that of character. An applicant who, there is reason to believe, is not of good character should not be employed under any circumstances. An applicant's character will be judged from her appearance, her manner of speech, her place and condition of resident, her previous working experience and other circumstances. Nothing is to be gained, and a great amount of damage will follow from the employment of people not morally sound. In cases of doubt, where an injustice might be done the applicant by rejecting her, personal investigation should be arranged for.

2. *Deportment and Appearance.*

The deportment of an applicant while waiting to be interviewed as well as during the interview, will be closely watched. Note will be made as to whether the applicant is well mannered, refined in appearance, and courteous in speech, or whether she is inclined to be pert or insolent in manner, flippant in speech and unladylike in demeanor.

By observing the expression of the eyes, the appearance of the skin, teeth, and finger nails, the condition and style of the clothing, and the manner of walking, a fairly correct judgment can be formed of the applicant's general habits and conduct. By judicious questioning and by observing the manner of talking and of answering questions, a judgment of the sincerity, perseverance and reliability of the applicant can be obtained.

3. *Mental Qualifications.*

An opinion of the applicant's mental qualifications will be formed from her quickness to grasp what is said to her, from her attention and answers to questions, from the manner in which she fills out the application form, from the nature of the questions asked and the amount of assistance required by her in connection with filling out the form. Attention should be given as to whether or not the items are written in the proper spaces and in a businesslike way.

Further indication of the mental qualities of an applicant may be obtained by noting whether her eyes are clear and bright, or whether they are heavy and dull looking. Eyes that are clear and bright indicate an alert mind, whereas those that are heavy and dull indicate that the applicant is indolent or of a slow or stupid type of mind, or that her health is poor. A shifting gaze often indicates either a nervous temperament or an unstable type of mind. A hardened expression may be the result of either of vicious habits of life or of adverse circumstances.

The personal characteristics and mannerisms of the applicant will be observed and judgment formed as to her ability to think clearly and to act promptly and intelligently.

4. *Education.*

As far as may be practicable, applicants should be required to have completed a course of study in a public or private school equivalent to the eighth grammar school grade. Due allowance will be made, however, in the case of naturally

bright girls who, through force of circumstances, have been unable to complete such a course. Courses of study in night schools, or in business schools, and experience gained in business offices and other places of employment, will also be taken into consideration.

If the applicant was not sufficiently advanced for her age at the time of leaving school, she will be questioned as to the reason for this, in order to determine whether it was due to natural backwardness, or was caused by some interruption to her course, such as ill health or moving from place to place.

An applicant will be required to read aloud a selection from the "Operators' General Regulations" or other matter relating to employment by the Company. Note will be made as to whether the applicant gives evidence that she has a correct understanding of the subject matter.

Note also will be made of the grammatical correctness of her conversation, of its freedom from slang and of the degree of refinement in the use of language.

Applicants to be eligible should be able to write neatly and legibly, freely and without flourishes.

5. *Age.*

The labor laws differ in different states, so that no uniform recommendations can be made. The following represent general requirements which may be varied in different localities due to the local provisions:

No person under the age of fourteen years will be employed.

No person under the age of sixteen years will be employed without a permit issued by the Board of Education, by the Superintendent of Schools, or by the County Commissioner of Schools. Such permit will be kept on file in the central office or other business office during the time the person is employed and will be returned to her upon leaving such employ. Every limited vacation permit will, upon its expiration, be void and of no effect. Such permits expire on Labor Day of each year.

Persons under the age of sixteen years will be employed only under special conditions and when authorized by the General Traffic Superintendent. In all cases, employees under sixteen years of age are required by law to attend continuation school four hours a week where such schools are provided.

No person under the age of sixteen years will be allowed to work between the hours of 6 P. M. and 6 A. M.

No person under the age of eighteen years will be allowed to work between the hours of 10 P. M. and 5 A. M.

In any case where an applicant states that she is just sixteen years of age, or where the interviewer has some doubt as to the age of the applicant, the latter will be asked to produce her employment, or her age and schooling certificates. If such certificate is not available, the applicant will be required to produce proof of her age in the form of a birth certificate, a baptismal certificate, a school record, a certificate from the Board of Health or some other satisfactory evidence of age.

Applicants who are over twenty-five years of age are not generally considered eligible for operating work, because women of that age who have not been employed are not so easily taught as are those who are under that age. In the case of people employed for night work, the age limit will be thirty years. Exception for the age limit set herewith may be made at the direction of the Training Department Manager or the traffic department official in charge of the territory covered.

6. *Marriage.*

Married women who are living with their husbands should not be employed. In such cases there are usually home duties which interfere with the employee's attention to the work, and her attendance and permanency of employment are often unsatisfactory.

Women who are married, but not living with their husbands, may be employed if there is evidence that attendance and permanency of employment will be satisfactory.

Widowed or divorced women may be employed if conditions regarding the care of any children and other conditions which might interfere with regularity of attendance and permanency of employment are satisfactory.

7. *Length of Residence in City.*

Applicants who have recently moved to the place where employment is desired will be closely questioned to ascertain whether they will be likely to remain. An applicant who has moved to the locality in question with her parents and whose father is employed, so that there is every indication that her residence is permanent, will be considered desirable as far as this factor is concerned. An applicant whose family lives in another locality and who is living with relatives, with friends, or is boarding, is not likely to remain a length of time

which would warrant her employment, and will be employed only after she has lived in the place in which employment is desired for three months or more.

8. *Place and Condition of Residence.*

An applicant, applying for a position in a division or district other than the one in which she resides, will not be considered eligible for a position in that division or district unless the facilities for traveling are such that she may readily reach the central office to which she may be assigned, at any hour of the day or evening. If she can not readily reach the required central office, she will be requested to make application in the proper division or district.

If an applicant is not living with her parents, the reason for this, and the name and identity of the person with whom she is making her home, will be asked. If the reason given does not reflect on her desirability and character, she will not be disqualified for this reason, except as it is thought likely to affect the permanency of her employment.

An applicant will be asked whether she has any home duties or responsibilities that would in any way interfere with her regular attendance. If such interference exists, the applicant will not be considered eligible.

Residence in an undesirable locality will be considered, and in some cases given a personal investigation. It sometimes happens that an applicant lives with her family in a locality from which applications are rejected as a rule, and if this is found to be true upon investigation, such applicant may be employed. Applicants otherwise acceptable but not living in unsatisfactory localities and who are not living with their immediate families, wil be required to move from the district before they can be given employment.

9. *Present Employment.*

An applicant who, at the time of applying, is employed by another firm will be required to give a ten days' or two weeks' notice to the firm with which she is employed. It will be explained that we require such notice and that it is the proper procedure. If there is satisfactory evidence that the firm for which the applicant is working does not require notice of leaving, this requirement will be waived. An applicant who is required to give notice to her present employer will be given a complete examination in order to determine that she is entirely acceptable, and that it will be definitely understood

that she will be employed after having completed the required amount of time with her present employer.

10. *Physical Condition.*

It is of great importance that the persons employed be in good physical condition and that they be physically fitted for the work they are to do. For this reason each applicant will be carefully scrutinized for the purpose of determining as far as possible the general condition of her health and her physical qualifications.

Examinations as to physical condition are usually conducted by a nurse or doctor working under the direction of the Medical Department. Where this arrangement is in effect the interviewer will only pass on the general physical condition. Applicants may be disqualified by the interviewer, due to any of the following evidences of physical unfitness, without having the applicant examined by the Medical Department representative:

A. Uncleanliness.

B. Noticeable body odors or bad breath.

C. Deformities which would affect the relations of the applicant to other employees, which would make it unsafe for the applicant to walk up and downstairs, or which would render the employee incapable of satisfactorily performing any portion of the work.

D. Speech with a pronounced brogue or foreign accent which evidently could not be rectified during the training course, or any defect in the voice which does not leave it clear and resonant.

It is essential that the voice of an applicant be clear and pleasant in quality and that there will be no roughness in her manner of speaking. It will also be noted whether she lisps badly or stammers.

In addition to the reading test already mentioned, the applicant will be required to repeat a list of numbers compiled for the purpose. During both tests a note will be made of the distinctness of her articulation, of the accuracy of her pronunciation and of the evidence of any impediment in her speech.

E. Applicants who are too tall, too short, too large or too small for our work.

The height of an operator should be at least five feet, and may be approximately ascertained by noting whether it is greater or less than a certain distance from the floor,

shown by a mark on the wall, as the applicant stands or passes near it.

As an operator should be able to reach easily a considerable part of the switchboard in front of the operators adjacent to her, it will be necessary to measure the maximum reach of the applicant. The reach of the applicant will be considered as the distance from the seat of her chair to the tip of her forefinger when the hand is open and the hand and arm extended and raised as far as they will go in a vertical direction.

As a rule, the reach of the applicant should be at least three feet six inches, and may be measured by having a stick of this length and noticing whether or not the applicant can touch the upper end of it when it is in a vertical position, the lower end resting on the seat of her chair.

F. Hearing, such that the applicant cannot readily hear what is said to her by the interviewer.

G. Disfigurement of the face or hands, due to eruptions, rash, sores, or very disfiguring scars.

Where a complete physical examination by a representative of the Medical Department is not arranged for, a special bulletin should be issued covering the conduct of a detailed physical examination, and outlining the physical requirements.

Where a physical examination is conducted by a representative of the Medical Department, applicants will be graded A, B, or C to indicate the degree of their physical fitness.

When so authorized by the Medical Department, subdivisions of these grades will be made, and indicated as A-1, A-2, B-1, B-2, etc. In either case the letter will indicate whether the Medical Department considers the applicant physically fit for employment. The codes will be interpreted as follows:

a. An applicant graded "A" (or where sub-divisions are used, A-1, and A-2) will indicate that the applicant is physically fit for employment.

b. An applicant graded "B" (or where sub-divisions are used, B-1 and B-2) will indicate that the physical condition of the applicant is not entirely satisfactory. If it is desired to employ applicants so graded, further particulars will be secured from the examining physician before a final decision is reached.

c. An applicant graded "C" will indicate that the

applicant is physically unfit for employment. Further particulars may be secured from the examining physician, but the applicant will not be employed except with the approval of the General Traffic Superintendent.

11. *Attitude Toward Hours and Nature of Central Office Duty.*

It is of the utmost importance that the applicant be given a clear understanding of the hours and nature of central office duty, including the conditions governing Sunday and holiday work, and that the applicant be entirely willing to undertake employment under those conditions.

An applicant who would not be willing or able to work the hours assigned to her in a central office, or to work on Sundays, and legal and religious holidays, will be considered ineligible.

An applicant who requires work at special hours not covered in our regular schedule, or who desires to be relieved from duty at periods not provided for in the regular schedule will not be accepted.

12. *References and Former Employers.*

The application form provides for the applicant furnishing information in regard to her last employer. This is done in order to obtain information regarding the work which the applicant has been doing, the salary obtained, etc. This employer can also be used as a reference when desired.

The type of work performed by the applicant for a former employer and the conditions under which she worked will be considered in connection with determining whether:

a. The development of the applicant's character and mind was helped or hindered by the type of work performed.

b. The applicant was subject to the proper kind of discipline.

c. The applicant is qualified to fill the position of operator.

d. The applicant will be satisfied to work for the salary offered.

Applicants are also required to give the names of two business men with whom they are acquainted. These names can be used as references when desired. If the applicant presents a card or letter of recommendation, this may be accepted in place of one or more of the references, provided the person

originating the recommendation is considered reliable by the interviewer.

The following will be considered as satisfactory references:

a. A reputable business man or woman.

b. The principal or teacher of the last school attended by the applicant.

c. An employee of the Telephone Company in good standing.

d. The pastor or priest of the church attended by the applicant.

DISPOSITION OF INELIGIBLE APPLICANTS AND APPLICATIONS.

1. *Statements Made to Ineligible Applicants.*

As a general rule, rejected applicants will be told at the termination of the interview, or necessary interviews, that they cannot be accepted for employment. If the reasons for deciding that an applicant is ineligible are such that they can be made known to her, they will be told to her tactfully. Care will be exercised to avoid wounding the sensibility of an applicant and specific information as to the cause of the rejection will be withheld where there is any danger of this occurring.

The following items illustrate the causes for rejection which usually may be safely discussed with the applicant:

a. Age.

b. Unwillingness to work hours prescribed, or to comply with other regulations.

c. Not having lived in the locality a sufficient length of time to warrant employment.

d. Married and living with husband.

In cases where the cause for rejection is such that the applicant might be sensitive in the matter, she can be told that her application is not accepted, due to the fact that she is not "adapted to our work," and the reason withheld. In other cases where the applicant, when told that she is rejected, would be able to recognize the cause even though it is not stated, so that there is still some chance of wounding her sensibility, she will be told that her application will be considered, and if it is accepted, she will be notified of this fact within two days.

Rejection of applicants will be handled in a way to retain every rejected applicant as a friend of the Company. Statements even indirectly reflecting on the character of the applicant will never be made. In the case of experienced oper-

ators whose previous record was unsatisfactory, statements as to the point in which her service was unsatisfactory are to be avoided.

2. *Disposition to Be Made of "Ineligible" Applications.*

The reason for considering an applicant ineligible will be entered on the application form under "Comments," and will be initialed by the person conducting the interview.

Where it is considered advisable to mark "ineligible" applications in such a way that they may readily be distinguished from "eligible" applications, a check mark will be placed in the upper left hand corner of the application form.

All applications from ineligible applicants will be filed in alphabetical order.

MANAGEMENT.

1. *General.*

The management of the Training Department should be conducted with the constant aim in view of maintaining a competent organization working for the development of well trained students. A student, when graduated from the training course, should be capable ordinarily of operating alone at the central office on a light position, within three days after she reaches the central office. This requires well trained assistants and careful attention to routines and to the assignment of duties to the different members of the training staff. As far as is practicable, the work to be done in the department should be assigned to different people, or groups, and should be outlined for them so that there will be no misunderstanding as to the work which each is to perform.

The following is an outline of the duties that might be assigned to each member of the training staff. This list does not attempt to cover every duty and should be subject to modification and additions as required.

2. *Manager.*

Secure and train a competent training staff.

Encourage visits to the Training Department by central office people, especially Chief Operators, and in this and other ways instill a sense of mutual confidence which will lead to a complete harmony of effort.

See that the Training Department cooperates in every way with the central offices, in

a. Checking up on the grade of students furnished

them, and adopting methods of improving the quality of students.

b. Assisting in the training work conducted by the central office;

c. Assisting where possible in the training of central office supervisors.

d. Furnishing from the Training Department staff, when opportunity offers, well trained people for central office executive positions.

Keep in touch with the work of other Training Departments, and profit from their methods and experiences.

3. *Application Supervisor.*

See that each applicant is properly greeted when entering the application room.

Arrange so that enough trained interviewers are available to care for the applicants without undue delay and arrange so that interviewers, as required, can be called upon and put at work without delay.

Keep a daily record of the applications received, the applicants accepted and the applications rejected, so as to be able to report the status of this work when called upon for the information.

See that all assistants are thoroughly trained in the work in accordance with the methods outlined under Div. 1, "Engaging Operators."

Direct the work of visiting supervisors, meeting with them daily, in order to keep closely in touch with the work which they are doing.

Discuss with the Manager any situation in regard to students in training which requires attention and also obtain advice as to the disposition of difficult cases as regards applicants.

Keep in touch with the chief operator and supervisor of class rooms consulting with them at intervals as to the general quality of students who are being accepted and as to special cases which may come up from time to time which affect your work directly or indirectly.

4. *Chief Operator.*

Supervise the work of desk and floor supervisors and "B" operators so as to be familiar at all times with the character of the work done by these supervisors.

Cooperate with the supervisor of class rooms in the preparation of schedules and do whatever is necessary

to insure a smooth operation of all routines which affect the operating room work.

Develop a training course for desk and floor supervisors and see that sufficient new material is trained from time to time to insure an adequate and competent force.

Keep in touch with the work given in connection with each lesson. See that it covers the important points of the lesson, that the amount of work given in different lessons is equalized, as far as is practicable, and that the routine laid down for the desk work is closely followed by all desk supervisors.

Assist the floor supervisors by training them in their work and illustrating to them, in so far as it is necessary, how this work should be performed.

Watch the record cards of students in training and be in a position to pass final judgment as to their acceptability for work in the central offices.

See that the operating room is kept in a thoroughly neat and orderly condition, that the room is well lighted and ventilated. At times when the operating room is vacated for relief and lunch periods, have the windows lowered, fans started if necessary, and the room thoroughly aired out.

See that training on fire drills is conducted at intervals with each class so that they will be thoroughly conversant with this procedure when they reach the central office.

Arrange so that the desk and floor supervisors will be at the Training Department fifteen minutes before the scheduled time of starting switchboard work in the morning and arrange for a full complement of desk and floor supervisors and "B" operators to start their work.

Have students enter and leave the operating room in an orderly manner in accordance with the following details:

a. Have them march in single file.

b. When entering the operating room have them informed as to the positions they are to occupy, assigning the student at the head of the column to the farthest position and the remaining students in regular order thereafter.

c. Have students hold the plugs of their operators' sets in their left hand and instruct them to take their positions from the left of the position.

d. After the student is seated have her transfer the set plug to the right hand jack and draw the set cord across her lap.

e. Dismiss or relieve students according to the regular central office practice and tell them while they are marching out where they are to go, that is, whether to the class room or on relief.

See that the battery switch is operated to cut off battery from the switchboard when leaving for the night.

Make a report of tardiness and absent time on the part of operating room supervisors.

Hold meetings of operating room supervisors in order to discuss their work with them.

5. *Supervisor of Class Rooms.*

Draw up a daily class schedule and cooperate with the chief operator in carrying it out.

Write out information for each class room instructor from the class schedule, giving her information as to the hourly disposition of the students in her charge.

Supervise the work of all class room instructors whether experienced or new, by listening to presentations, recitations, study periods and drills at frequent intervals. Assist class room instructors to prepare for the above work and illustrate for them where necessary how such work is to be done. A schedule covering the disposition of the time of each instructor will be found advisable in order that this time will be used to the best advantage.

Prepare a training course for class room instructors and arrange to train a sufficient number of instructors so that instructors trained for this work will be available to meet any condition likely to be met.

As far as practical give the opening and final lectures to students and supervise the other special lectures. Keep acquainted with students and classes by visiting each class daily.

Hold meetings of class room supervisors in order to discuss the work with them.

Interview students as to deportment, dress, attendance, tardiness, etc., where the case is at all serious, so that it cannot readily be taken care of by the class room supervisor.

In the case of students who have been absent from any lesson, arrange to see them upon their return and

determine the class to which they should be assigned in order to receive training in all lessons. It should be carefully explained to the student that her being absent has made it necessary to place her in another class in order to keep up on the work which has been missed.

Report the tardy and absent time of supervisors to the chief clerk.

See that roll calls of each class are held twice daily and that reports on the tardy and absent time of students are forwarded to the chief clerk.

Cooperate with the matron in the duties which are assigned to her.

Look after visitors to the Training Department and see that they are assisted in obtaining the information desired by them.

Arrange the special training courses required for ex-operators, visiting supervisors, male employees who take the students' training course, etc.

Keep in touch with the record cards of students and determine which ones of the backward students should be assigned to a succeeding class or given special training. Where a student is apparently not making sufficient progress in the work to justify further training, confer with the chief operator regarding her and if her opinion agrees with yours, interview the student and dismiss her.

Note: In the smaller Training Departments the handling of the dismissal of students will usually be assigned to the Manager.

Handle the dismissal of a student as quietly and unobtrusively as possible, holding the interview where it canot be over-heard by anyone else. Explain the reasons why it is necessary for the student to discontinue the work, presenting it to her from the standpoint that her progress is such that it undoubtedly would not pay her to continued in the work. Express regret at her not being able to continue in the work and endeavor in every way to leave her in a friendly frame of mind. If there is a possible chance that later on she will be more successful, suggest to her that she attempt the work at a later period. Endeavor in each case to have the student satisfied that it is desirable for her to discontinue the work. Do not in any case give the student the impression that she is being dismissed from the service.

Subject to the approval of the Manager, arrange to handle dismissals of students for any cause (as well as

the one given in the paragraph above). Be guided in doing this by the methods outlined in the paragraph above and endeavor to handle each case so that a student will be convinced of the justice of your decision.

6. *Matron.*

Keep the sitting room neat and orderly, straightening it up after each relief period.

Assign lockers to students, give out locker keys, look after return of locker keys, maintain an adequate supply of keys and keep the required record on key assignments.

Assign headsets and keep the required record of assignments. Supervise the condition of the headset racks to see that headsets are placed in the right compartments, that transmitters are disinfected, that transmitter straps are in good condition.

Look after the umbrella check racks. Maintain a supply of extra umbrellas, stockings and tennis shoes and supply them to students as required. Keep a record of such supplies issued and look after their return.

Maintain a supply of needles, thread, hairpins and other small miscellaneous items for the use of students as required.

Take charge of the medicinal supplies and look after the dispensing of authorized medicines.

Assist any students who are ailing and look after the dressing of vaccinations. Keep the Quiet Room in a spotless condition, changing the linen as often as required.

Assist new classes of students in looking after their lunches and assist in teaching them the dining room routine. Generally assist the Training Department supervisors in keeping the quarters, class rooms and hallways, in a neat and orderly condition.

Look after supplies for the toilet room and see that this room is invariably well equipped.

Make friends of the students and look after their welfare while in the Training Department. Report to the Manager any conditions or practices which are causing or may cause dissatisfaction to students. Recommend changes in furnishings and equipment, or in the care of the quarters, which would add to the comfort and welfare of students. Report to the Manager any case coming within your knowledge where the Company might under its general regulations, be of assistance to students.

April 15, 1920.

CITY EXHIBIT 128-J.

PERSONNEL SERVICES

Received from

AMERICAN TELEPHONE AND TELGRAPH COMPANY

By the

ILLINOIS BELL TELEPHONE COMPANY.

During the Years 1920 and 1921.

SERVICES IN PERSONNEL WORK RECEIVED

FROM THE AMERICAN TELEPHONE AND TELEGRAPH COMPANY

BY THE ILLINOIS BELL TELEPHONE COMPANY

DURING THE YEARS 1920 AND 1921

Almost constantly during the years 1920 and 1921, we received personal assistance and advice covering public relations and employers' relations from the Vice President's Office of the American Telephone and Telegraph Company.

In each of the Associated Companies there is at least one man assigned to personnel work, and it is his duty to gather and forward to the American Telephone & Telegraph Company all of the successes and mistakes in public relations and employes' relations in his territory, for the benefit of all of the other Telephone Companies.

It is also his duty to take the information gathered together and edited by the A T & T Co. from the other Bell Telephone Companies, and apply whatever suggestions can be used in his territory.

The following are some of the personnel items, on which valuable assistance was rendered by the American Telephone & Telegraph Company during the years 1920 and 1921.

1. EXCERPTS FROM PERSONNEL LETTERS

This is a book published every three months by the Vice President's Office of the American Telephone & Telegraph Company (the last copy of which dated January 1st, 1922, contains 127 pages) covering the activities and personnel work in all of the Bell Telephone Companies throughout the United States. The following is the table of contents in the last issue of this book:

#1—Executive and Supervisory Conferences.
#2—Joint Conferences between Employe Representatives and Management Representatives.
#3—Activities and general interest.
#4—Mobilization of entire personnel for better public relations.
#5—General.
#6—Public Relations Committees and Service Committees.
#7—Visits of Subscribers to Exchanges.
#8—Miscellaneous Incidents.
#9—Miscellaneous Activities.
#10—Demonstration Boards for the Education of Subscribers.
#11—Employes' Stock Purchase Plan.
#12—Visits of Employes to the Hawthorne Works of the Western Electric Company for Education Purposes.
#13—Safety Code Committees Among Employes.
#14—First Aid Training and Contents for Employes.
#15—Vail Medal Awards for noteworthy Public Service.
#16—Christmas Holiday Activities.
#17b—Miscellaneous.

Copies of these Excerpts from Personnel Letters are forwarded to all General Department Heads, for their information, and all items are discussed at the regular weekly Executive Conferences with a view to putting in operation any suggestions which might apply favorably to the Illinois Bell Telephone Company. These Excerpts from Personnel Letters, have proved invaluable in furthering work in our company.

2. Pamphlets (Educational pamphlets published and distributed by the American Telephone & Telegraph Company)

During the years 1920 and 1921, the Vice President's Office of the American Telephone & Telegraph Company selected various papers and addresses by telephone employes in various walks of life; had them printed and distributed to the various Bell Companies for the education of all employes.

The following pamphlets of this particular series were received during the years 1920 and 1921.

The Telephone Business
Telephone Companies and Corner Grocery Stores
Necessity for a Fair Return
The Commercial Department's Job

Supervision
How to Build Your Own Company
Efficient Organization Practices
Cooperation
Public Relations
Humanizing the Job
Relation of Acounting to Telephone Business
Our Relations with the American Telephone & Telegraph Company
Recognizing the Other Fellow
The License Contract
The Parent Company's Place in the Bell System
Call it Our Company
Human Progress and the Telephone.

The Illinois Bell Telephone Company receives 1300 of each of these pamphlets as they are issued. They are distributed throughout the organization to the Supervisory employes, who are gathering them together as a library to use the subject as they see fit in talks to various groups of their employes. Each pamphlet contains the following statement:

Feb. 14, 1920 Letter forwarding copy of monthly review of business conditions and advice as to its use. Copy of this review received each month.

Mar. 18, 1920 Letter submitting series of bulletins issued by the Illinois Public Utilities Committee.

Mar. 23, 1920 Letter transmitting statement issued by the New York Telephone Company outlining conditions before, throughout, and after the war as they affected the telephone service.

Mar. 29, 1920 Letter advising that 250 copies of Outlook were forwarded as Industrial Relations—also advising method of distribution.

Mar. 31, 1920 Letter forwarding copy of report on National Industrial Conference.

Apr. 6, 1920 6500 copies of the Outlook advising that they contained article by Sherman Rogers on work of telephone operator—also advising the method of distribution.

Apr. 25, 1920 Letter forwarding article entitled "Where the Pennies Go" with photographic illustrations. Covers division of one dollar in telephone expense.

May 12, 1920 "Hard Facts about Supplies" advice as to method of distribution.

May 18, 1920 Letter forwarding a number of copies of Walter Camp's Daily Dozen exercises.

May 21, 1920 Letter transmitting copy of letter sent to new employees of the Kansas Telephone Company (Personal Greetings)

Policy of management
Opportunity for Advancement
Employes' Association
Benefit Plan

May 25, 1920 Letter transmitting editorial from New York Tribune on telling employes about the business.

June 2, 1920 Letter forwarding copies advertising put out by Hydraulic Pressed Steel Car Co.

June 14, 1920 Letter advising that several hundred copies of wall maps of trunk lines of the Bell System were available for distribution to the various exchanges and advice as to its value to the employes handling Long Distance Calls.

June 15, 1920 Letter forwarding 35 copies of Mr. Rorty's pamphlet on Industrial Relations and advice as to distribution.

June 17, 1920 Letter transmitting one of ten pamphlets (all of which we later used and distributed) by Mr. E. C. Blomeyer, which appeared in the magazine Telephony and advice as to its distribution.

June 18, 1920 Letter giving further information regarding the distribution of the Blomeyer pamphlets.

June 6, 1920 Letter transmitting paper by Mr. Elston of the A T & T Co. on the preparation of Safety Rules for Employes.

July 6, 1920 Letter forwarding copy of new savings plan for employes proposed by the A T & T Co.

Aug. 5, 1920 Letter forwarding comments regarding pamphlet "Hard Facts about Supplies" and advising method of using it by a Manager of the Mountain States Telephone Company.

Sept. 29, 1920 Letter transmitting copies of address by William P. Bancker on "A Glimpse at World Market Conditions" with an offer to supply additional copies for distribution.

Sept. 4, 1920 Letter submitting list of Executive, Department, Division, District and Exchange Officials, issued by the New England Telephone & Telegraph Company, advising that similar list might be effective if used by our Company.

Nov. 12, 1920 Letter forwarding Western Electric Savings Plan for employes.

Nov. 15, 1920—Letter—advice on article prepared by the Illinois Committee on Public Utilities.

Dec. 4, 1920 Letter transmitting first anouncement of the object of the Theodore N. Vail Memorial Fund.

Dec. 6, 1920 Submitting pamphlet issued by the Emergency Committee of the American Gas Association on Public Relations.

Dec. 22, 1920 Letter advising method of choosing recipient of the Vail Medal by forming Committee of employes and supervisory officials.

Dec. 27, 1920 Advising of the furlough plan in operation by Long Lines Division; advice that they would be available to all of our employes.

Jan. 4, 1921 Letter transmitting copy of letter sent to General Plant Superintendent by Mr. Burcher regarding the following:

Joint Conferences between employes and management;
Safety Rules
Trips to Hawthorne Works
First Aid Conferences

Feb. 8, 1921 Letter submitting bulletin from Illinois Committee on Public Utility Information and advice as to its distribution to the Commercial employes.

Feb. 15, 1921 Letter advising of the sculpture and date of completion of the Vail Medal, also assistance in the preparing of the Citation and that Citations would be printed by the American Telephone & Telegraph Company, as submitted by the Associated Companies.

Feb. 17, 1921 Letter transmitting copy of Certificate of Merit by the Ward Department of a Citation by the Chief of Staff of the United States Army. Later additional copies were supplied by the A T & T Company for distribution at the various exchanges.

"Pamphlets already issued include the following, of which complete set or single copies are available upon request from your Department Head."

This makes it possible for any employe who is interested in self-development to secure any copy of the pamphlets. The subjects cover a very broad scope and make it possible for an employe to gather a very broad knowledge of the Telephone business for his self-development, if he takes advantage of this opportunity.

Notes on Current Economic Problems

The first three pamphlets on the above subject by Mr. M. C. Rorty, Chief Statistician of the A T & T Co. which have already been received:

#1—Industrial History
#2—Social and Industrial Organization
#3—Production and Distribution.

These pamphlets are also of an educational nature and are being distributed in a similar manner to the above pamphlets.

In this series of five pamphlets, Mr. Rorty intends to cover economic problems from the beginning of history to the present day.

Series of Ten Pamphlets by Mr. E. C. Blomeyer, United Independent Telephone Association

The Vice President's office of the A T & T Company secured for the Illinois Bell Telephone Company between eight hundred and one thousand of each of the following pamphlets, which are also of an educational nature, as indicated by the titles:

#1—The Company's Prosperity and Yours
#2—Public Relations and the Manager
#3—The Reasons Behind the Rates
#4—The High Cost of Supervision
#5—The Job—and the Telephone Man
#6—Haphazard Bill
#7—Form Four Eleven Forty-four
#8—You and Me and Jim
#9—My Company 'Tis of Thee
#10—And Cabbages and Kings

These pamphlets were distributed in a similar manner to the other pamphlets mentioned above and proved of a great deal of assistance and interest to the employes. In fact, due to the shortage of the supply, in a great many cases one book was passed around to a number of employes.

3. First Aid Training Among the Employes

Almost continuously for the year 1921, we received advice, examples of actual results and practical demonstrations of First Aid Training among the employes. The A T & T Co. also supplied us with printed copies of the complete lessens and illustrated charts for the use of the First Aid Instructors in our territory. This was of very valuable assistance and enabled us to start the First Aid Training in our territory the first part of this year without any preliminary work necessary to develop the course.

This work has been so completely outlined and prepared by the A T & T Co. that we anticipate in a very short time to have approximately 1000 Plant Department men in training, without any special preliminary work on our part.

4. Savings Plan and Household Budget Book

The Vice President's Office of the A T & T Co. arranged an exhaustive study of Savings Plans for the benefit of all of our employes. Plans of various Companies were gathered together, and several plans were submitted for consideration by the Illinois Bell Telephone Company, and the present plan now in operation in all of the Bell Telephone Companies was put into effect May 1, 1921.

In connection with the continued campaign for Thrift the A T & T Co. drew up a Household Budget Book, which was distributed free of charge to any employe of the Illinois Bell Telephone Company who requested one of those books. In 1920, approximately 1800 were distributed and 1921 about 2500.

We also distributed during 1921, a large number of pamphlets on the question of Thrift by Mr. E. K. Hall, Vice President of the A T & T Co.

5. Employes Association

We have received continuously during 1920 and 1921, help from the Vice President's Office of the A T & T Co. in connection with the employes' associations. This has been particularly along the line of Committees formed for improving the service, public relations, and various subjects of mutual benefit to the public, the employes and the management.

This has taken the form of Joint Conferences held at stated periods between the representatives of employes and management representatives, in various branches of the work, for the mutual benefit of all concerned.

6. Cooperative Buying

At the time when co-operative buying was a very live subject among the employes of all large organizations, the Vice President's Office of the A T & T Co. secured the experience of other Bell Telephone Companies and other Industrial Organizations for the information and education of the employe representatives and management representatives of the Illinois Bell Telephone Company. This information proved invaluable as it helped us to avoid the mistakes made by others.

On the attached sheets are given some notes regarding a list of letters, circulars and help received from the A T & T Co. during 1920 and 1921

Feb. 19, 1921 Letter transmitting fifty copies of Article on Thrift by Mr. E. K. Hall and advising as to Method of Distribution.

Mar. 8, 1921 Letter advising the establishment of Central Committee, for keeping the Associated Companies posted on Vail Medal Awards. Also offering services of Mr. Brandt, Secretary, for any assistance we would need in making awards. Series of stories to be prepared by the A T & T Co. for publication in the Company magazine.

Mar. 14, 1921 Submitting a story regarding the Vail Medal for the Company magazine.

Mar. 15, 1921 Calling attention to the following articles in the Anual Reports:

1. License Contract
2. Analysis of dividend rates
3. Relation of Western Electric Company to Bell System. Offering sufficient copies of annual report to supply supervisory employes.

Mar. 15, 1921 Telegram—advice on Vail Medal Awards and advice on several cases submitted.

Mar. 15, 1921 Letter offering suggestions as to method of placing Camp's "Daily Dozen" exercises before employes.

Mar. 23, 1921 Letter advising as to the distribution and cost of the book on public relations entitled "Winning the Public".

Mar. 30, 1921 Letter advising contemplated American Telephone & Telegraph Company savings and stock purchase plan for employes. Also about New York Company savings plan and possibility of combining the two plans.

Apr. 1, 1921 Information regarding cooperative buying by New York Telephone employes.

Apr. 9, 1921 Letter forwarding copies of illustrated pamphlet entitled "A Trip Through the Telephone Office in Minneapolis" and an explanation of how it was used and the results obtained.

May 11, 1921 Statistics covering study of the lives of a group of one hundred representative men, showing their financial standing at various ages. This article used for publicity on the Savings Plan.

May 23, 1921 Letter transmitting copies of statement on Thrift by D. L. Doherty, President of the Cities Service Company.

May 24, 1921 Letter submitting pamphlet by Samuel Insull on Public Utility Industry of Illinois, and advice as to its distribution to the supervisory employes and as to where we could obtain additional copies.

May 25, 1921 Transmitting article which appeared in the Saturday Evening Post entitled "Bear Times and the Employe Stockholder". This in connection with the Stock Purchase Plan.

May 25, 1921 Letter suggesting routine for selling rights on A T & T stock.

May 28, 1921 Letter covering address on Useful Cooperation by Mr. W. C. Kerr, President of the Westinghouse, Church, Kerr & Company.

May 28, 1921 Letter transmitting paper by Pacific States Traffic men covering story of Personnel work in the Traffic Department, also advice as to its use and distribution.

June 7, 1921 Letter submitting copy of Western Union Telegraph Company's income participation Plan.

June 11, 1921 Letter advising that a Committee was formed in New York to receive the bodies of telephone employees who lost their lives during the war. To be cared for by New York Companies until placed on the train for Chicago, giving complete details.

July 8, 1921 Letter submitting results of meeting of Long Lines Employe Assembly.

July 14, 1921 Letter giving suggestions and advice on Pioneers' Convention at St. Louis.

July 14, 1921 Letter submitting clipping from New York Tribune advising of the excessive margin that a credit house must have in order to conduct a successful business. This is an object lesson on installment purchases.

July 18, 1921 Letter calling attention to the practice of some corporations in handling applicants for employment. Suggestions to be considered on this subject.

Aug. 29, 1921 Letter regarding publication of Theodore N. Vail's Biography and the opportunity offered our employes of purchasing this book at a reduced price. Also suggested a method of calling it to the attention of our employes.

Sept. 4, 1921 Letter giving additional information as to the method of handling applications for the purchase of Mr. Vail's Biography, also advising that the history of the Signal Corps in the War entitled "Circuits of Victory" will shortly be published and the method of calling it to the attention of the employes.

Sept. 23, 1921 Giving complete details of plan to show names of each employe on the desk, size, style of type to be used and complete cost and method of assembling.

Sept. 7, 1921 Letter to Mr. E. S. Bloom advising that Circuits of Victory has been published and would be offered to the employes at a greatly reduced price.

Oct. 8, 1921 Letter forwarding copy of Mr. Vail's biography to be used in calling it to the attention of the employes.

Oct. 8, 1921 Letter advising 1000 copies of application blanks for Circuits of Victory were forwarded.

Oct. 19, 1921 Letter forwarding 50 copies of pamphlet on "Central Office Management by Mr. Keating of the New England Telephone & Telegraph Company.

Nov. 1, 1921 Letter submitting First Aid Lectures, First Aid Charts for course of First Aid instructions for employes, which was compiled by the A T & T Co.

Nov. 2, 1921 Telegram advising copy of book entitled "Circuits of Victory" was on way to be used for calling it to the attention of the employes.

Nov. 2, 1921 Letter to Mr. Sunny suggesting a fitting way of observing Armistice Day.

Dec. 1, 1921 Letter transmitting article by D. F. Houston entitled "How the Telephone is Furnishing a Safe Basis for Profitable Investment". Several hundred copies forwarded for distribution.

Dec. 18, 1921 Letter transmitting pamphlet by Arthur Thompson of the Duquesne Light Company on Public Relations, together with a resumé of what the Duquesne Light Company has done to better Public Relations.

June 19, 1920 Mr. Hall, Vice President of the American Telephone & Telegraph Company, talked to approximately 350 Supervisory people on Personnel Work in general and relationship between employes and management.

Nov. 16, 17, 18, 1921 Mr. Griffin of the American Telephone & Telegraph Company, visited Chicago and conferred with Personnel Representatives on general personnel subjects.

Nov. 28 & 29, 1921 Mr. Wickenden of the American Telephone & Telegraph Company, conferred with all departments regarding the employment and training of college graduates and conduct of educational courses for employes.

CITY'S EXHIBIT 132.

The Economist, Nov. 25, 1911 p. 909

"The official offer made for the stock is dated Nov. 23, 1911 and is signed by U. N. Bethel, Vice President of the American Company; it follows:

We hereby offer to exchange American Telephone and Telegraph Company stock for stock of the Chicago Telephone Company share for share. To be exchanged hereunder stock must be properly endorsed for transfer and deposited with the Northern Trust Company, Chicago, on or before December 23, 1911. The Chicago Company's dividend payable December 30, 1911, will go to stockholders of record December 20. American Telephone and Telegraph Company stock will be delivered on or before January 23, 1912, and will carry the dividend which begins to accrue January 1, 1912. Therefore no adjustment of dividends will be involved.

President B. E. Sunny of the Chicago Telephone Company, under date of November 23, 1911, makes the following statement in regard to the parent Company's offer.

The American Telephone and Telegraph Company has made an offer to the stockholders of the Chicago Telephone Company to exchange American Telephone and Telegraph stock for Chicago Telephone Company stock, share for share. The letter containing this offer goes to the stockholders today. The dividend rate is the same on both stocks, 8 per cent. The American Telephone and Telegraph stock affords participation in the average success of the telephone

business of the United States, while the Chicago stock covers the telephone property in Chicago and a few outside counties only. The American Telephone and Telegraph Company stock has a broader market, which is highly advantageous.

Enough of the large stockholders who have been consulted have expressed their satisfaction with the proposition to indicate that stockholders generally will take advantage of the offer."

December 30, 1911, p. 1125.

"Chicago Telephone—The time for the deposit of the Company's shares with the Northern Trust Company under the plan of exchanging par for par for stock of the American Telephone and Telegraph Company has been extended to the close of business today. This is largely on account of the absence from the city of some of the stockholders and it is expected that practically all of the stock will come in under the plan."

City's Exhibit 133.

PRICE RANGE A. T. & T. STOCK AND CHICAGO TEL. CO. STOCK. FROM INVESTORS MANUAL JUNE 1911 AND JUNE 1914.

		A. T. & T. Co.		Chgo. Tel. Co.		
		Low	High	Low	High	
	1900			180	245	)
	1			218	276	)
	2			160	230	)
	3			114	160	)
	4			115	147½	)
	5			125	143½	) 1911
	6			101	139	)
	7			95	134½	)
(	8	101	132⅝	106	152¼	)
1911 (	9	125	145⅛	127	138	)
(	1910	126¾	143⅜	110	137	)
(	11	131½	153⅛	115	141¼	)
1914 (	12	137⅝	149⅛	142	145	)
(	13	110	140	None		)

Only 20 shares Chgo. Tel. Co. Stock sold in 1912.

CITY EXHIBIT 134

"CHICAGO TELEPHONE COMPANY,

212 W. Washington Street

Chicago, December 1, 1920.

TO THE STOCKHOLDERS:

It is desirable, in the judgment of the board of directors of the Chicago Telephone Company, in view of the purchase of the Illinois properties of Central Union Telephone Company, authorized by the board at its meeting held October 27, 1920, and today authorized and approved by order of the Public Utilities Commission of Illinois, that the name of the company be changed to "Illinois Bell Telephone Company" and that the articles of incorporation of the company be amended accordingly.

You are, therefore, notified that, pursuant to resolution of the board of directors, a special meeting of the stockholders of this company will be held at the office of the President, Room 1801, 212 West Washington Street, Chicago, Illinois, on Wednesday, the 22nd day of December, 1920, at 10 o'clock A. M., for the purpose of submitting to vote of the stockholders the question of amending the articles of incorporation of the company by changing the name of the company so that the same shall be "Illinois Bell Telephone Company."

If you do not expect to be personally present at the meeting, please sign and return the proxy herewith, in the enclosed envelope. Upon return of this proxy, duly executed, the necessary revenue stamp, required by law, will be affixed and cancelled.

E. G. DREW,
Secretary."

I hereby certify that the above is a copy of a notice sent to stockholders of this company on December 1, 1920.

ILLINOIS BELL TELEPHONE COMPANY.

A. R. BONE,
Secretary.

(Seal)

June 3, 1929.

CITY EXHIBIT 135.

ILLINOIS BELL TELEPHONE COMPANY

I hereby certify that the following is a true copy of resolution duly adopted by the stockholders of the Illinois Bell Telephone Company at a special meeting duly called and held on December 22, 1920, at which meeting a quorum was present.

A. R. BONE,
Secretary.

(Seal)

"*Resolved*: That the articles of incorporation of this company be and the same are hereby amended by changing the name of the company from "Chicago Telephone Company" to "Illinois Bell Telephone Company," and the officers are directed to take such action as is required by law to put such amendment into effect."

CITY EXHIBIT 136.

"ARTICLE III.

Section 2. At this meeting the directors shall elect from their own number an executive committee of five members, including the president and the chairman of the board of directors, if any. Any director of the company may act upon the committee when requested by the president in place of any member absent or unable to act."

"ARTICLE IV.

Section 1. The board of directors shall have and take entire general charge and supervision of the business and affairs of the corporation. The board of directors shall have power to fill all vacancies which may occur in the board or in the offices of the company; and also to remove any officer or employee whenever in its judgment the interests of the company require such removal.

"Section 2. The executive committee shall have all the powers of the board of directors in the management and administration of the affairs of the company when the board is not in session."

"ARTICLE V.

Section 2. Meetings of the executive committee may be called by the chairman of the board of directors or president at any time and place. A majority of the executive committee shall constitute a quorum for the transaction of all business."

I hereby certify that the above quoted sections of the by-laws of this company are true copies of the provisions of the

by-laws now in effect, and that these provisions were effective as quoted during the years 1923 to 1928, both inclusive.

ILLINOIS BELL TELEPHONE COMPANY.

A. R. BONE,

(Seal) *Secretary.*

June 3, 1929.

City's Exhibit 137.

LIST OF ASSOCIATED OPERATING TELEPHONE COMPANIES OF THE BELL SYSTEM AS OF JUNE 30, 1923, AND THE PERCENTAGE OF THEIR CAPITAL STOCK OWNED BY AMERICAN TELEPHONE AND TELEGRAPH COMPANY.

Name of Company	Headquarters	Per Cent of Total Outstanding Voting Stock Owned by American Tel. and Tel. Co.	Per Cent of Total Outstanding Voting Stock Owned by Associated Companies: Per Cent	Owned by
Associated Companies Directly Controlled by A. T. and T. Co. as of June 30 1923				
New England Tel. & Tel. Co.	Boston, Mass.	57.94%		
New York Tel. Co.	New York, N. Y.	100.00		
Ches. and Pot. Tel. Co. of Balto. City	Washington, D. C.	100.00		
" " " " Virginia	" "	100.00		
" " " " West Va.	" "	100.00		
Southern Bell Tel. and Tel. Co.	Atlanta, Ga.	100.00		
Ohio Bell Tel. Co.	Cleveland, Ohio	99.99#		
Michigan State Tel. Co.	Detroit, Mich.	99.97#		
Indiana Bell Tel. Co.	Indianapolis, Ind.	99.99#		
Wisconsin Tel. Co.	Milwaukee, Wis.	100.00		
Illinois Bell Tel. Co.	Chicago, Ill.	98.85		
Northwestern Bell Tel. Co.	Omaha, Neb.	100.00		
Southwestern Bell Tel. Co.	St. Loius, Mo.	100.00		
Mountain States Tel. and Tel. Co.	Denver, Colo.	72.82		
Pacific Tel. and Tel. Co.	San Francisco, Calif.	Com. 89.49		
" " " " "	" " "	Pfd. 74.37*		

Associated Companies Indirectly Controlled by A. T. and T. Co. as of June 30, 1923				
Bell Tel. Co. of Pennsylvania	Philadelphia, Penna.	12.53	87.47%	New York Tel. Co.
Delaware & Atlantic T. and T. Co.	" "		100.00	New York Tel. Co.
Diamond State Tel. Co.	" "		100.00	Bell Tel. Co. of Pa.
Ches. and Pot. Tel. Co. (N. Y.)	Washington, D. C.	17.69	82.31	New York Tel. Co.
Cumberland Tel. and Tel. Co.	Nashville, Tenn.		99.99	Southern Bell T. & T. Co.
Southern Calif. Tel. Co.	Los Angeles, Calif.		100.00	Pacific Tel. and Tel. Co.
Home Tel. and Tel. Co. of Spokane	Spokane, Wash.		100.00	" " "
Bell Tel. Co. of Nevada	San Francisco, Calif.		100.00	" " "
Associated Companies not Controlled by A. T. & T. Co. as of June 30, 1923				
Southern New Eng. Tel. Co.	New Haven, Conn.	33.34		
Cincinnati & Suburban Bell Tel. Co.	Cincinnati, Ohio	29.71#		
Connecting Companies not Controlled by A. T. and T. Co. as of June 30, 1923				
Bell Tel. Co. of Canada	Montreal, Canada	33.86		
Cuban-American Tel. and Tel. Co.	Havana, Cuba	Com. 50.00		
" " " " " " ...	" "	Pfd. 50.00*		

#Excluding shares to qualify Directors.
*Preferred Stock with voting rights.

CITY'S EXHIBIT 138.

LIST OF SUBSIDIARY STATE COMPANIES OF THE AMERICAN TELEPHONE AND TELEGRAPH COMPANY AS OF JUNE 30, 1923—100 PER CENT OWNED*

Name of Company	Headquarters	Number of Qualifying Directors
American Tel. and Tel. Co. of Alabama	Montgomery Ala.	5
" " " " Arkansas	Little Rock, Ark.	5
" " " " Baltimore City	Baltimore, Md.	5
" " " " Delaware	Wilmington, Del.	5
" " " " Georgia	Atlanta, Ga.	5
The American Tel. and Tel. Co. of Illinois	Chicago, Ill.	5
American Tel. and Tel. Co. of Indiana	Indianapolis, Ind.	5
" " " " Indian Territory	Muskogee, Okla.	5
" " " " Iowa	Davenport, Iowa	5
" " " " Louisiana	New Orleans, La.	5
" " " " Michigan	Detroit, Mich.	5
" " " " Minnesota	St. Paul, Minn.	3
" " " " Mississippi	Pass Christian, Miss.	5
" " " " Missouri	St. Louis, Mo.	6
" " " " Nebraska	Omaha, Neb.	7
" " " " New Jersey	Jersey City, N. J.	5
" " " " North Carolina	Raleigh, N. C.	5
The American Tel. and Tel. Co. *of Pennsylvania*	*Philadelphia*, Penna.	5
American Tel. and Tel. Co. of Rhode Island	Providence, R. I.	5
" " " " South Carolina	Columbia, S. C.	3
" " " " Massachusetts	Boston, Mass.	3
" " " " Tennessee	Nashville. Tenn.	5
" " " " Virginia	Richmond, Va.	5
The American Tel. and Tel. Co. of Wisconsin	Milwaukee, Wis.	5
American Tel. and Tel. Co. of West Virginia	Charleston, W. Va.	5
" " " " Wyoming	Cheyenne, Wyo.	4
" " " " Kentucky	Louisville, Ky.	5
The Colorado and Eastern Tel. and Tel. Co.	Denver, Col.	5
Columbian Tel. and Tel. Co. of Rhode Island	Providence, R. I.	4
East Pittsburg Telephone Company	Philadelphia, Penna.	5
The Kansas Tel. and Tel. Co.	Kansas City, Kan.	5
The Ohio Tel. and Tel. Co.	Cincinnati, Ohio	7

*Non-operating Companies holding the title to Toll Plant of the American Tel. and Tel. Co. (a New York Corporation).

CITY'S EXHIBIT 139.

OTHER SUBSIDIARIES OF THE
AMERICAN TELEPHONE AND TELEGRAPH COMPANY
AS OF JUNE 30, 1923

Name of Company	Headquarters	Per Cent of Total Outstanding Voting Stock Owned by American Tel. and Tel. Co.
Western Electric Company	New York, N. Y.	98.29%
Central Union Telephone Company	Chicago, Ill.	99.99
195 Broadway Corporation	New York, N. Y.	70.00
205 Broadway Corporation	" " "	100.00
Bell Telephone Securities Company	" " "	100.00

CITY'S EXHIBIT 140.

ILLINOIS BELL TELEPHONE COMPANY

DEPRECIATION RATES APPLICABLE TO CLASSES OF PLANT BY DIVISIONS

EFFECTIVE JANUARY 1, 1924

CHICAGO AREA

Class of Plant	Life in Yrs.	Salvage	City Exhibit 140 Deprec. Rate %	Composite Rates by Accounts
Right-of-Way—Exchange	20	0	5.0	5.0
" " " —Toll	40	0	2.5	2.5
Buildings—Fireproof	40	40	1.5	
" —Fireproof C.O.	25	30	2.8	2.5
" —Non-fireproof	20	20	4.0	
C.O. Equipment	12	20	6.7	6.7
Station Apparatus	5	70	6.0	6.0
Station Installations	..	..	....	....
Interior Block Wires	..	..	....	....
Private Branch Exchange	7	50	7.0	7.0
Booths and Special Fittings	8	35	8.0	8.0
Exchange Pole Lines	14	5	7.5	7.5
Exchange Aerial Cable	14	15	6.0	6.0
Exchange Aerial Wire—Chicago	6	15	*14.1	6.2
Exchange U.G. Conduit—Main	50	0	2.0	2.4
" " " —Subsidiary	20	0	5.0	
Exchange U.G. Cable—Main	21	40	2.9	
" " " —Subsidiary	15	20	5.3	3.4
Exchange Submarine Cable	10	0	10.0	10.0
Toll Pole Lines	16	0	6.3	6.3
Toll Aerial Cable	16	20	5.0	5.0
Toll Aerial Wire—Copper	19	30	3.7	
" " " —Iron	14	15	8.2	3.8
" " " —Load Coils	20	0	5.0	
Toll U.G. Conduit	50	0	2.0	2.0
Toll U.G. Cable—Cable	21	40	2.9	
" " " —Load Coils	21	0	4.7	3.1
Toll Submarine Cable	10	0	10.0	10.0
Office Furniture and Fixtures	12	20	6.7	6.7

*Applicable to 44% of Exchange Aerial Wire Account—56% of this account being retired through the Station Removals and Changes Account 607.

Bold face in red.

CITY'S EXHIBIT 141.

T. C. No. 173
Replaces certain parts of
T. C. 117 and T. C. 159
and supplements T. C. 117.
Item 18

Dear Sir:

I am transmitting herewith a copy of Traffic Circular No. 117, "Adjustment of Force," which includes the revised sheets forwarded with T. C. No. 159 (pages 5 and 6, Form E-162 and Table 6), and six new supplemental sheets (Tables 3E, 3F, 6A, 6B, 6C and 6D) described below.

Since the issuance of Traffic Circular No. 117, "Adjustment of Force" very considerable improvement in the methods used and results obtained in this important part of traffic management has been noted. These results have been helped considerably by the introduction of somewhat different means of carrying on the instruction work and development of operators in the central offices, which in turn have made it possible to effect some economies in the use of central office supervisors. For this reason at this time when it was necessary to reprint Traffic Circular No. 117, it was thought advisable to include two additional supervisory tables which show the number of supervisors required for varying numbers of operators when the provision in the busy hour is on the basis of 1 supervisor to 11 operators and 1 supervisor to 12 operators. These tables are numbered 3-E and 3-F and are included in this reprint. Additional copies of these tables have also been printed and will be furnished to you on request for inclusion in old copies of Traffic Circular No. 117.

It has been found useful also to have a computation table for the calculation of experience factors and for this reason 4 tables (6A to 6D, inclusive) have been compiled to show the products of the experience factors which are shown on table 6 when multiplied by varying numbers of operators. Table 6A corresponds to column A of table 6, etc. These tables also have been printed separately and will be furnished to you on request for inclusion in existing copies of T. C. No. 117.

It is not our expectation that existing copies of Traffic Circular No. 117 will be discarded and this reprint substituted but that existing copies will be completed by the substitution of the supplemental pages issued with Traffic Circular No.

159 and the inclusion of the new tables mentioned above. However, if you require a few additional copies of the reprinted circular which includes all of these supplemental pages, we will be glad to furnish them on request. All new copies of T. C. No. 117 sent out from here will contain the revised and added pages.

Yours truly,
Vice President and Chief Engineer.

Attached:

Copy of T. C. No. 117 with revised and supplementary pages.

Adjustment of Force.

General Outline.

1. The purpose of this circular is to describe methods for computing the amount of local and toll operating room force required to handle the traffic at central offices. It provides a routine for estimating the force which should be secured and trained to meet future requirements, methods for determining the force necessary for each hour of the day and methods for scheduling the hours of work of the operating employees in a manner to secure a satisfactory and economical arrangement of the force.

2. The circular is designed to give the general application of methods for adjusting force which may be adapted readily to the local authorized practices in respect to such matters as the length and arrangement of hours of work, arrangement of Sunday and holiday work, the assignment of the work of preparing records of traffic, computing force adjustments, etc. Certain practices in respect to these matters are assumed in this circular, but it is not intended that these practices should supersede existing instructions except as such instructions are modified by orders supplementing this circular.

3. It is advisable, generally, that the work of computing the requirements and drawing the schedules for a group of several offices should be assigned to some person specially trained in this work. The traffic chief and the chief operator, of course, should be responsible for preparing accurate records of traffic, placing the schedules in effect and assigning operators to the individual tricks which they are to work. This division of the work has many advantages.

4. The various steps in determining force adjustment may be computed by different methods, the value of which depends largely upon the convenience with which they may be applied and the amount of detail work necessary to assure sufficient accuracy. This circular describes methods which will best meet the average condition in the larger offices. For the smaller offices simple instructions may be drawn up from this circular describing how to fill out the form of hourly requirements, and supplying weighted co-efficients and the column of figures from the tables of position hour requirements applying to the office concerned.

5. When the traffic records are accurate, when position loads are properly balanced on the switchboard and when the training of the force is reasonably good, schedules drawn in accordance with this circular and followed consistently, should provide amply for the traffic requirements. The proper adjustment of force is of course a matter of fundamental importance in giving good service economically. The work involved, therefore, in making the necessary routine records and computing the adjustment in accordance with these methods is fully warranted.

GENERAL APPLICATION.

1. Close co-operation is essential in all stages of the work between the person responsible for making the force adjustment, the traffic chief and the chief operator. The results of the estimate of future traffic as prepared on Form E-160, the hourly requirements as computed on Form E-162 and the schedules as drawn on Form E-163 should be placed in the hands of the district traffic chief and the chief operators as soon as they are prepared, for their comment before they are finally adopted. Where the proper co-operation exists in respect to these matters it should follow that after a few months of careful scrutiny of the records and clearing up of such irregular conditions noted below, as may exist, the adjustment work will go on automatically as a clerical routine and with very little necessity for alteration as a result of this review.

2. Accurate traffic records, of course, are fundamental in determining the proper adjustment and all persons concerned should co-operate to see that the records are made properly. Between the periods when the adjustment is worked out completely, it is necessary often to change the number of oper-

ators to meet the changing traffic requirements. The three persons named above should keep in close touch in respect to this matter, following the peg counts and busy hour counts of calls which are specially designed to give the necessary information as to these conditions, and they should arrange for any intermediate changes which are found necessary.

3. When in the judgment of these persons there is a discrepancy between the requirements as computed and the number of operators which appear to be necessary, then the records should be carefully scrutinized, and if they are wrong, correct records should be produced. All other conditions affecting this matter should be investigated and any found to be wrong, corrected. The following are some of the common conditions which cause these seeming discrepancies:

a. The schedule is thought to be inadequate but frequently it is found that the real trouble is that the schedule is not being followed in certain hours. Wide discrepancies of this kind are common. It will be of great advantage in checking this condition to have a daily half-hour coun of positions occupied, which may be made readily by the clerk. A simple form may be drawn up on which should be entered the required position hours for each half-hour with suitable spaces below for the actual force. For half-hours when less than the specified number of operators is present the figures should be entered in red.

b. A general condition of overload is thought to exist but frequently this impression is caused by certain sections of the board being overloaded while others are underloaded, thus producing only an average load for the office as a whole. This condition may be detected readily by means of a count of connections in each panel, as outlined in Traffic Circular No. 26. The clerk should make the circuit of the board about once in five minutes for a considerable period, particularly during the busy hours, and should count the answering plugs in the various panels. The number in each panel should be entered on a suitable form. It is found often that while loads on adjacent positions are approximately equal, groups of 6 to 10 positions habitually are carrying much higher loads than the average for the office. The obvious remedy is to readjust the load on the board.

c. An overload for an individual hour is thought to exist but as a matter of fact the overload exists only in part of the hour. This condition may be detected through half-hour or quarter-hour records. Great care should be exercised in taking these records, however, that the readings are made exactly on the hour or quarter-hour, as otherwise the records will be highly misleading. A discrepancy for individual hours also in many cases may be attributed to having too great a proportion of the less skilled operators in these hours.

d. Fluctuations in the day to day traffic for certain hours are thought to exist and there is apparent justification for this suspicion in the peg count records. It is found frequently, however, that these fluctuations exist only in the figures and not in fact and are due to the readings not being taken exactly on the hour or to not being taken in the same order or with the same speed.

e. Peg counts not being representative is perhaps the most common claim. However, if the records are correct, the busy hour counts are accurate, the work of figuring the adjustment is accurate, and particularly if the features outlined in a, b, c and d foregoing are properly cared for, then little suspicion will remain in respect to the peg counts. Where suspicion still persists, then special counts taken for a few consecutive days ordinarily will show that the peg counts are representative, or if not, they will show what the difficulty really is.

f. Hours of work are disliked in many cases largely because of evening work. This work, however, is necessary in our business, and a great deal of objection to it is removed where the tricks are arranged in accordance with the outline given in this circular and where the operators are advised of their assignments in a tactful manner.

4. The work done in connection with adjusting the force will be found to be a valuable test of the accuracy of many of the central office records and of the quality of the administration of the office. The adjustment not only will serve to provide an adequate number of operators at all times, which is its principal object, but also will reveal conditions which should be corrected, all of which will repay the effort expended and be of great value in administering the office in a manner to give good service.

EXPERIENCE OF OPERATORS.

TABLE 6
(Revised March, 1921)

Length of Service Number of Months	Single Office Cities (Five or More Positions) Small Multi-Office Cities	Multi-Office Cities	Multi-Office Cities (When Specially Authorized)	Multi-Office Cities (When Specially Authorized) All Toll Offices
	A	B	C	D
1	56.0	46.0	39.5	34.0
2	74.1	63.9	55.6	48.6
3	81.7	74.2	66.5	59.3
4	86.7	80.3	74.5	67.5
5	90.4	84.9	80.0	74.1
6	93.3	88.4	84.2	78.8
7	95.6	91.5	87.5	82.9
8	97.7	93.9	90.1	85.9
9	99.3	95.7	92.3	88.5
10	106.6	97.3	93.9	90.5
11	101.7	98.5	95.4	92.2
12	102.6	99.6	96.6	93.5
13	103.4	100.5	97.7	94.7
14	104.1	101.3	98.8	95.8
15	104.6	102.1	99.6	96.8
16	105.0	102.7	100.3	97.6
17	105.4	103.3	100.9	98.4
18	105.8	103.6	101.5	99.1
19	106.0	104.0	102.0	99.7
20	106.2	104.4	102.4	100.3
21	106.4	104.7	102.9	100.8
22	106.6	105.0	103.3	101.3
23	106.8	105.2	103.7	101.7
24	107.0	105.4	104.0	102.2
25-27	107.3	105.8	104.4	102.8
28-30	107.7	106.3	104.8	103.4
31-33	107.9	106.6	105.3	103.9
34-36	108.0	107.0	105.8	104.3
37-42	108.0	107.5	106.4	105.1
43-48	108.0	107.9	107.0	105.9
49-54	108.0	108.0	107.5	106.6
55-60	108.0	108.0	107.9	107.1
61-66	108.0	108.0	108.0	107.6
67-72	108.0	108.0	108.0	107.9
Over 72	108.0	108.0	108.0	108.0

City's Exhibit 142.

In answer to question, Page 2044, Transcript of Record.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

AVERAGE LOANS TO EACH LICENSEE COMPANY (DIVIDING THE SUM OF THE LOANS OUTSTANDING ON THE FIRST DAY OF JANUARY, APRIL, JULY AND OCTOBER BY 4) WERE:

	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928
New England Tel. and Tel. Co.	$ 0	$ 125,000.00	$ 357,000.00	$ 7,502,500.00	$ 6,875,000.00	$ 3,437,500.00	$ 19,859,100.00	$ 37,919,200.00	$ 13,000,000.00	$ 0	$ 3,149,599.81
Southern New England Tel. Co.	12,500.00	662,500.00	1,965,843.32	1,991,118.32	2,696,532.49	1,875,000.00	1,850,000.00	3,350,075.00	3,445,950.00	2,737,500.00	5,105,654.04
New York Tel. Co.	27,467,500.00	13,647,621.13	22,338,716.44	49,357,049.79	16,779,123.56	9,111,553.99	36,696,553.99	59,081,553.99	37,932,553.99	47,134,985.89	17,915,309.73
New Jersey Bell Tel. Co.φ										2,886,809.87	26,635,868.68
Bell Tel. Co. of Penna. and two Associated Cos.	0	0	1,810,313.08	0	0	3,012,500.00	18,850,000.00	24,900,000.00	0	6,237,929.60	825,000.00
Ches. and Pot. Tel. Cos.	0	0	1,131,250.00	2,412,500.00	2,765,050.00	4,962,069.57	4,592,019.56	11,735,769.57	17,729,519.57	3,506,250.00	7,617,013.31
Southern Bell Tel. and Tel. Co.	732,500.00	245,275.00	3,165,238.45	8,664,988.45	13,448,988.45	10,934,678.84	2,240,000.00	2,454,750.00	7,257,420.18	14,558,127.41	18,700,622.91
Cumberland Tel. and Tel. Co.	2,977,650.00	4,935,000.00	7,741,105.38	7,818,330.38	8,227,080.38	8,440,830.38	3,707,480.38	7,791,670.84	7,443,277.09		
Ohio Bell Tel. Co.	5,405,118.00	7,850,000.00	8,850,000.00	19,127,500.00	6,005,000.00	9,530,000.00	12,853,107.94	13,765,607.94	10,531,107.94	21,296,607.94	5,659,859.03
Cinn. and Subs. Bell Tel. Co.	0	0	0	0	0	0	0	0	0	0	0
Michigan Bell Tel. Co.	10,626,250.00	15,428,750.00	19,256,645.83	21,850,198.16	17,874,665.63	20,990,465.00	20,690,232.50	11,271,250.00	24,590,000.00	38,495,000.00	19,177,385.95
Indiana Bell Tel. Co.	0	0	7,831,250.00	11,348,750.00	13,763,312.50	16,427,375.00	17,776,125.00	16,193,830.37	6,561,069.61	6,500,000.00	3,500,000.00
Wisconsin Tel. Co.	231,587.50	150,000.00	1,451,794.45	3,649,294.45	2,418,573.62	3,263,644.00	506,250.00	387,500.00	150,000.00	712,500.00	2,335,384.89
Illinois Bell Tel. Co.	0	800,000.00	1,522,230.95	3,200,000.00	741,462.50	200,000.00	0	2,317,041.90	6,874,655.91	3,750,000.00	4,575,776.19
Northwestern Bell Tel. Co.	4,327,109.75	17,944,768.75	25,660,344.52	10,866,211.13	4,885,000.00	0	0	4,512,500.00	2,562,500.00	75,000.00	561,284.70
Southwestern Bell Tel. Co.	10,505,221.00	23,013,200.00	25,885,111.61	27,803,061.22	27,299,761.22	17,598,761.22	5,218,690.31	0	6,612,279.90	9,937,059.81	9,162,089.53
Mountain States Tel. and Tel. Co.	1,042,800.00	1,134,750.00	1,567,018.20	2,774,518.20	3,736,518.20	3,468,575.50	1,524,302.00	1,225,000.00	1,375,000.00	1,486,500.00	4,496,056.92
Pacific Tel. and Tel. Co. and three Associated Cos.	5,825,000.00	5,787,500.00	7,812,500.00	12,900,000.00	12,974,356.25	11,362,500.00	33,468,750.00	34,588,600.00	46,375,000.00	34,998,725.00	41,551,880.48
Central Union Tel. Co.*	35,630,000.00	35,620,000.00	38,309,906.99								
Total	$104,803,226.25	$127,144,364.86	$176,295,669.25	$191,296,030.14	$140,490,424.80	$124,615,453.50	$179,832,611.68	$231,494,349.61	$192,440,334.19	$194,312,995.52	$170,968,786.17

φ Began operations in October, 1927.

* Ceased operations at end of 1920 and license contract relations terminated.

June 5, 1929.

City's Exhibit 142

City's Exhibit 142A.

In answer to question, Page 2044, Transcript of Record.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

AMOUNTS RECEIVED FROM ALL ASSOCIATED BELL COMPANIES FOR LICENSE PAYMENTS DURING THE YEARS 1918–1928, WERE AS FOLLOWS: a)

	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928
New England Tel. and Tel. Co.	$ 1,258,385.77	$ 1,401,962.79	$ 1,714,678.95	$ 1,786,123.28	$ 1,909,331.37	$ 2,066,648.27	$ 2,225,943.84	$ 2,500,014.23	$ 2,596,433.64	$ 2,695,114.85	$ 1,373,292.00
Southern New England T. Co.	232,398.90	275,996.98	329,048.22	352,509.07	377,886.56	417,165.39	452,193.95	501,551.78	493,077.40	538,902.96	297,775.39
New York Tel. Co.	2,914,229.07	3,220,345.96	3,746,553.47	4,316,280.75	4,718,208.36	5,332,461.45	6,034,026.36	7,007,399.65	7,065,748.33	c) 7,411,399.74	3,577,734.16
New Jersey Bell Tel. Co. b)										d) 413,890.33	851,333.71
Bell Tel. Co. of Penna. and two Associated Companies	1,108,774.78	1,278,341.30	1,496,706.02	1,719,427.50	1,870,372.08	2,077,043.51	2,315,133.12	2,662,050.33	2,627,460.64	c) 2,714,513.66	1,320,206.76
Ches. and Pot. Tel. Cos.	561,385.98	677,443.76	802,783.57	933,533.19	961,938.35	1,033,412.80	1,085,933.64	1,197,652.67	1,153,637.05	1,222,174.91	636,982.23
Cumberland Tel. and Tel. Co.	459,934.82	545,266.65	640,612.60	646,556.67	686,416.84	722,997.65	805,710.39	951,944.20			
Southern Bell T. & T. Co.	416,722.50	492,268.38	581,534.54	651,550.64	712,190.04	759,854.24	822,320.46	946,076.81	e) 1,894,602.75	2,040,494.11	1,082,860.53
Ohio Bell Tel. Co.	153,837.15	215,528.06	266,387.90	678,396.37	872,673.65	984,645.39	1,091,629.29	1,274,052.29	1,277,943.99	1,402,144.09	752,524.33
Cinn. and Subn. Bell Tel. Co.	152,852.64	176,896.75	209,388.97	242,201.02	258,961.58	279,516.46	300,332.49	324,606.65	321,714.55	360,798.05	190,786.64
Michigan Bell Tel. Co.	378,360.40	480,452.22	616,547.03	749,995.91	798,663.90	925,965.98	1,089,201.86	1,200,749.12	1,009,916.60	1,280,633.89	704,316.78
Indiana Bell Tel. Co.			202,856.17	316,090.65	323,689.44	363,065.37	441,656.87	459,179.11	437,688.77	464,986.80	240,597.63
Wisconsin Tel. Co.	245,966.97	285,239.81	333,190.53	382,267.53	432,235.24	481,215.18	511,081.07	559,918.88	546,302.25	594,776.82	315,701.40
Illinois Bell Tel. Co.	1,018,664.21	1,197,122.08	1,471,411.40	2,039,208.09	2,151,467.06	2,322,356.12	2,512,711.54	2,728,255.74	2,684,090.42	2,920,877.39	1,558,988.09
Northwestern Bell Tel. Co.	669,136.19	756,234.98	923,500.32	978,071.78	1,024,144.97	1,117,555.92	1,159,186.45	1,229,998.93	1,117,783.25	1,165,076.92	643,924.64
Kansas City Tel. Co.		59,138.98	134,128.47	174,669.54	197,367.72	217,915.45	233,745.19	251,642.58	242,511.68		
Southwestern Bell Tel. Co.	1,092,362.95	1,294,880.32	1,470,439.01	1,669,445.61	1,743,462.08	1,953,606.91	2,078,436.97	2,281,806.94	2,294,071.57	f) 2,740,626.06	1,470,110.11
Mountain States T. and T. Co.	492,978.35	579,126.68	665,345.14	680,104.34	687,862.55	701,703.03	704,695.38	745,618.98	702,800.96	747,585.30	395,150.77
Pac. T. & T. Co. and 3 Assoc. Cos.	1,091,198.83	1,235,458.63	1,488,728.50	1,660,437.57	1,940,559.82	2,258,788.34	2,535,927.29	2,985,112.00	2,964,644.63	3,260,790.33	1,751,471.46
Bell Telephone Co. of Canada.	....	....	....	....	....	g) 293,450.92	384,625.79	389,582.82	419,874.60	479,865.22	458,608.54
Total	$12,247,189.51	$14,171,704.33	$17,093,840.81	$19,976,959.51	$21,667,431.61	$24,309,368.38	$26,784,491.95	$30,197,213.71	$29,850,303.08	$32,454,651.43	$17,622,365.17

a) Bases for Payments:
Years 1918 to 1925, inclusive —4½% of gross earnings
1926 and 1927 —4% " " "
1928 —2% " " "

b) Formerly Delaware and Atlantic Telegraph and Telephone Company whose earnings to and including September 30, 1927, were combined with those of the Bell Tel. Co. of Penna. for license contract purposes. Name changed September 26, 1927. The Company acquired from the New York Tel. Co. its property in New Jersey and began operating on a state-wide basis October 1, 1927.

c) Includes data pertaining to the State of New Jersey for first nine months 1927. (See note (d).

d) Data pertain to the State of New Jersey for the last three months 1927.

e) Cumberland Te'. and Tel. Co. merged with Southern Bell Tel. and Tel. Co. July 1, 1926.

f) Kansas City Tel. Co. merged with Southwestern Bell Tel. Co. January 1, 1927.

g) Contract effective January 1, 1923.

June 5, 1929.

City's Exhibit 142A

CITY'S EXHIBIT 142B.

In answer to question, Pages 2042 and 2045.
Transcript of Record,

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

THE AVERAGE NUMBER OF SETS (a) OF TELEPHONE INSTRUMENTS (STATIONS) AND REPEATERS (b) IN USE DURING 1918 TO 1927 (c) INCLUSIVE BY EACH LICENSEE COMPANY WAS:

	1918		1919		1920		1921		1922		1923		(d) Sets of Instruments			
	Sets of Instruments	Repeaters	Sets of Instruments	Repeaters	Sets of Instruments	Repeaters	Sets of Instruments	Repeaters	Sets of Instruments	Repeaters	Sets of Instruments	Repeaters	1924	1925	1926	1927
New England Tel. and Tel. Co.	749,061	107	788,880	102	860,326	299	942,470	422	10,023,697	686	1,116,532	909	1,236,669	1,323,990	1,393,514	1,421,531
Southern New England T. Co.	158,045	9	163,941	1	178,962	0	193,231	0	202,510	0	218,263	0	237,511	256,176	274,265	293,871
New York Tel. Co.	1,509,548	426	1,620,885	543	1,754,306	722	1,874,970	952	2,038,463	1,779	2,204,798	1,676	2,459,917	2,675,035	2,844,170	(e)2,876,008
New Jersey Bell Tel. Co. (f)																(g) 159,127
Bell Tel. Co. of Penna. and 2 Associated Companies	721,017	15	754,493	31	801,007	40	855,112	52	930,384	205	1,027,080	304	1,123,934	1,190,721	1,275,131	(e) 1,306,604
Ches. and Pot. Tel. Cos.	368,715	346	395,850	642	413,160	339	448,494	427	447,706	269	479,438	190	512,933	541,591	572,333	600,226
Cumberland Tel. and Tel. Co.	253,433	50	264,956	71	280,890	82	279,146	89	291,168	117	311,343	132	336,740	373,754	203,180	
Southern Bell T. and T. Co.	222,897	4	236,466	4	258,994	5	270,351	23	276,749	50	297,569	60	326,370	366,935	648,868	916,149
Southern Bell T. & T. Co. (h)	476,330	54	501,422	75	539,884	87	549,497	112	567,917	167	608,912	192	663,110	740,689	852,048	916,149
Ohio Bell Tel. Co.	104,688	...	109,697	...	123,481	1	328,291	17	370,812	54	405,760	75	445,412	497,995	563,577	627,935
Cinn. and Subn. Bell Tel. Co.	98,152	...	103,844	0	117,707	0	123,391	0	130,191	3	141,718	15	152,990	162,442	169,698	177,251
Michigan Bell Tel. Co.	290,820	34	294,572	49	317,530	61	330,935	78	348,041	139	380,904	156	422,589	478,960	546,085	591,183
Indiana Bell Tel. Co.					74,926	3	158,261	25	170,457	43	189,046	55	199,111	204,893	210,037	215,163
Wisconsin Tel. Co.	210,991	28	218,780	39	236,068	70	248,968	80	261,380	173	276,990	189	293,367	308,386	323,996	341,239
Illinois Bell Tel. Co.	655,719	91	686,179	115	736,322	247	901,546	474	940,373	950	1,014,995	1,254	1,103,694	1,189,381	1,284,059	1,374,328
Northwestern Bell Tel. Co.	479,202	98	498,289	100	537,011	141	559,979	140	585,650	177	599,455	188	636,008	660,547	688,443	711,772
Southwestern Bell Tel. Co. (i)	671,112	192	700,308	266	761,120	278	798,467	306	837,850	360	910,488	432	998,051	1,089,944	1,204,392	1,322,009
Mountain States T. and T. Co.	253,755	192	259,650	252	283,110	429	300,571	541	308,562	629	321,772	632	337,528	358,442	386,533	412,807
Pacific Tel. and Tel. Co. and 3 Associated Companies	675,907	241	694,952	331	745,068	1,045	809,705	1,953	911,776	2,935	1,039,702	3,284	1,169,714	1,284,494	1,409,930	1,518,103
Total	7,423,062	1,833	7,791,742	2,546	8,479,988	3,762	9,423,888	5,579	10,075,769	8,569	10,935,853	9,551	11,992,538	12,963,686	13,998,211	14,865,306

(a) Based on total number of receivers and transmitters divided by two, charged to companies as per records of the American Tel. and Tel. Co.
(b) Based on records of the American Tel. and Tel. Co.
(c) Instruments sold to Associated Companies at December 31, 1927.
(d) Ownership of repeaters turned over to Associated Companies, without charge, in 1923.
(e) Includes data pertaining to the State of New Jersey for first nine months 1927.
(f) Formerly Delaware and Atlantic Teleg. and Tel. Co. Name changed Sept. 26, 1927. The Company acquired from the New York Telephone Company its property in New Jersey and began operating on a state-wide basis Oct. 1, 1927.
(g) Data pertain to the State of New Jersey for the last three months 1927.
(h) Cumberland Tel. and Tel. Co. merged with Southern Bell Tel. and Tel. Co. July 1, 1926.
(i) Kansas City Tel. Co. merged with Southwestern Bell Tel. Co. Jan. 1, 1927.

June 5, 1929.

CITY'S EXHIBIT 142C.

Recheck of Testimony, Pages 2110-2112.
See Transcript of Record, Page 2135.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY
ILLINOIS BELL TELEPHONE COMPANY
ESTIMATED REQUIREMENTS AND CASH TAKEN
YEARS 1918 TO 1928

	Illinois Bell Tel. Co.		All Associated Companies	
	Estimated Requirements	Cash Taken	Estimated Requirements	Cash Taken
1918	$ 5,788,238	$ 3,966,900	$ 90,891,902	$ 87,547,879
1919	6,676,379	2,600,000	109,719,463	81,911,597
1920	6,052,000	4,550,000	105,383,875	99,409,675
1921	5,020,000	5,951,600	105,755,000	96,434,853
1922	12,350,000	9,911,500	105,805,000	80,397,861
1923	6,600,000	(a)	168,278,000	156,187,869
1924	10,080,000	(b) 1,979,500	242,224,000	230,101,219
1925	15,327,000	(b) 12,920,322	232,388,000	220,583,290
1926	15,612,000	13,500,000	192,552,000	161,266,747
1927	18,153,000	17,980,335	174,931,000	130,523,523
1928	19,400,000	(b) 18,669,864	174,125,000	140,516,788

(a) Loans to Illinois Bell Tel. Co. on open account—Jan. 1 to June 28 (date bonds were sold by Illinois Bell Tel. Co.) ..... $ 2,650,000

Payments to Illinois Bell Tel. Co. for capital stock (3 installments) ..... $ 7,923,100
Applied in repayment of loans 2,650,000
Net cash to Illinois Bell Tel. Co. 5,273,100

Proceeds from bond issue left with A.T. and T. Co. pending Illinois Bell Tel. Co. requirements for funds 10,767,240

Chicago Tel. Co. bonds maturing Dec. 1, 1923, purchased on the market by A. T. and T. Co. and delivered to the Trustee for account of Illinois Bell Tel. Co. ..... $ 2,391,353

As collateral for the Chicago Tel. Co. bonds the Trustee held U. S. Treasury Certificates. As bonds were purchased by the A. T. and T. Co. and delivered to the Trustee, as above, a proportionate amount of the U. S. Treasury Certificates were delivered to the American Company and the value thereof credited to the Illinois Bell Tel. Co. The total of such credits was 2,423,774
Net credit to Illinois Bell Tel. Co. 32,421

U. S. Treasury Certificates in excess of amount retained by Trustee to meet Chicago bonds maturing Dec. 1, 1923. The proceeds from the sale of these certificates were left with A. T. and T. Co. 325,135

U. S. Treasury Certificates sold to Illinois Bell Tel. Co. $11,137,424
Withdrawal of funds previously left with A. T. and T. Co. 11,124,796
Difference paid A. T. and T. Co. 12,628

Cash temporarily left with A. T. and T. Co. ..... $ 2,200,000
Repayment of above 2,200,000
0

$ 3,214,324

(b) Exclusive of repayments of funds previously left with A. T. and T. Co. June 5, 1929.

Bold face in red.

CITY EXHIBIT 142D.

Answer to question, page 2051, Transcript of Record.

Question: Indicate if there were any variations during those years (1918-1928) from the charge the American Tel. and Tel. Co. made to subsidiary (licensed) companies for moneys loaned, if such charge was other than 6% with 2% discount for cash.

Answer: 1918—

Cumberland	4% and 4¼%.
Michigan	4% and 4¼%.
Providence	4% and 4¼%.
Southern	4% and 4¼%.
Wisconsin	4% and 4¼%.
Cleveland	4%.
Pacific	4%.
New York	4%

Time notes 3 months to 1 year. Proceeds used to buy Liberty Bonds for employees.

1920—

Indiana—7% 3-year time notes due in 1923, paid in 1925, issued in connection with purchase of Indiana property from Central Union Tel. Co.

City Exhibit 142E.

In answer to question, page 2047 and 2050, Transcript of Record.

American Telephone and Telegraph Company.

Cost of Capital Funds Procured by the American Company Through Sale of Stock, Bonds and Other Borrowings During

Year	*Rate, %*
1918	8.33
1919	7.17
1920	8.00
1921	8.81
1922	8.66
1923	6.74
1924	8.16
1925	6.18
1926	8.42
1927	7.33
1928	8.11

June 5, 1929.

CITY'S EXHIBIT 142F.

In answer to questions, Pages 2040, 2045-6 and 2137, Transcript of Record.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

MAJOR CASES OF PROCEEDS FROM PUBLIC FINANCING BY ASSOCIATED COMPANIES TEMPORARILY PLACED WITH THE AMERICAN TEL. AND TEL. CO. UNTIL REQUIRED BY THEM

Company	Amount	Yield to Assoc. Co.	Description of Arrangement
1918 New England T.& T.Co.	$ 3,800,000.00	6%	Received notes of other Associated Companies for like amount endorsed without recourse, also repurchase agreement.
1920 Bell Tel. Co. of Pa....	16,051,252.63	8%	Loaned on Open Account.
1921 Illinois Bell Tel. Co....	3,053,000.00	7.84%	Loaned on Open Account.
1922 New England T.& T.Co.	15,800,000.00	5.38%	Received notes of other Associated Companies for like amount endorsed without recourse, also repurchase agreement.
1922 Pacific Tel. & Tel. Co.	15,277,219.17	5.63%	Loaned on Open Account.
1923 Illinois Bell Tel. Co....	10,767,240.33	5.53%	Loaned on Open Account for part of period, for remainder of period held U. S. Treasury Certificates with special arrangement providing return of 5.53% also repurchase agreement.
1924 Southwestern B. T. Co.	23,566,905.45	5.7%	Loaned on Open Account.
1925 Bell Tel. Co. of Pa....	16,200,000.00	5.2%	Loaned on Open Account.
1926 New England T.& T.Co.	9,450,000.00	5.02%	Received notes of other Associated Companies for like amount endorsed without recourse, also repurchase agreement.
1927 Illinois Bell T. Co.—			
Jan. 15.....	1,552,700.00	5.88%	Loaned on Open Account.
June 30.....	3,500,000.00	5.88%	Loaned on Open Account.
Sept. 30.....	5,250,000.00	5.88%	Loaned on Open Account.
1928 New York Tel. Co....	22,392,810.15	5.88%	Received notes of other Associated Companies for like amount endorsed without recourse, also repurchase agreement.

In addition to the foregoing, comparatively small amounts of Surplus funds of the Associated Companies were from time to time deposited with American Tel. and Tel. Co. temporarily on open account or as an offset to demand loans, until required.

June 5, 1929.

City's Exhibit 142G.

In answer to question, Pages 2043 and 2051, Transcript of Record.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY
AVERAGE FUNDS HELD AVAILABLE FOR
ASSOCIATED COMPANIES AND AVERAGE YIELD THEREON

Year	Average Funds Held Available For Assoc. Cos.	Average Yield %
1918	$ 39,196,479	2.98
1919	54,452,176	3.33
1920	37,809,008	3.33
1921	42,038,535	3.40
1922	80,590,018	3.85
1923	94,103,660	4.07
1924	83,350,883	3.55
1925	88,310,087	3.30
1926	88,160,130	3.71
1927	74,328,100	3.62
1928	102,175,926	4.34

June 5, 1929.

City's Exhibit 143.

ILLINOIS BELL TELEPHONE COMPANY

Total Telephones and Telephones per 100 Population.
In the City of Chicago.

Year	Population U. S. Census	Estimated Population Dec. 31	Telephones Dec. 31	Telephones per 100 Population
1880	503,185	.....	.....	.....
1883	.....	685,000	2,971	.434
1884	.....	745,000	3,377	.453
1885	.....	805,000	3,877	.482
1886	.....	865,000	4,274	.494
1887	.....	925,000	4,786	.517
1888	.....	985,000	4,790	.486
1889	.....	1,045,000	5,690	.544
1890	1,099,850	1,100,000	6,682	.607
1891	.....	1,160,000	7,839	.676
1892	.....	1,225,000	9,453	.772
1893	.....	1,285,000	10,482	.816
1894	.....	1,345,000	10,737	.798
1895	.....	1,400,000	11,961	.854
1896	.....	1,460,000	12,970	.888
1897	.....	1,520,000	14,060	.925
1898	.....	1,580,000	16,804	1.064
1899	.....	1,640,000	21,336	1.301
1900	1,698,575	1,695,000	27,785	1.639
1901	.....	1,750,000	42,511	2.429
1902	.....	1,800,000	63,020	3.501
1903	.....	1,850,000	80,117	4.331
1904	.....	1,900,000	91,848	4.834
1905	.....	1,950,000	110,935	5.689
1906	.....	2,000,000	131,630	6.582
1907	.....	2,050,000	156,107	7.615
1908	.....	2,100,000	181,580	8.647
1909	.....	2,150,000	207,671	9.659
1910	2,185,283	2,200,000	238,984	10.863
1911	.....	2,253,000	267,728	11.882
1912	.....	2,306,000	308,124	13.361
1913	.....	2,359,000	348,341	14.704
1914	.....	2,412,000	381,591	15.821
1915	.....	2,465,000	411,701	16.701
1916	.....	2,518,000	458,598	18.212
1917	.....	2,571,000	487,481	18.961
1918	.....	2,624,000	504,428	19.223
1919	.....	2,677,000	554,114	20.700
1920	2,701,705	2,730,000	575,840	21.093
1921	.....	2,785,000	605,495	21.741
1922	.....	2,840,000	638,694	22.489
1923	.....	2,895,000	691,545	23.887
1924	.....	2,950,000	741,936	25.150
1925	.....	3,005,000	790,764	26.314
1926	.....	3,060,000	848,070	27.714
1927	.....	3,115,000	903,460	29.003
1928	.....	3,270,000	942,015	28.807

CITY'S EXHIBIT No. 146.

ILLINOIS BELL TELEPHONE COMPANY

Date

I hereby certify that the following is a true copy of resolution duly adopted by the Board of Directors of the Illinois Bell Telephone Company at a regular meeting duly called and held on May 4, 1904 at which meeting a quorum was present.

.....

Secretary

President Wheeler submitted a draft of a proposed contract dated May 1, 1904, by and between the Western Electric Company and this Company for the purchase, handling and furnishing supplies for this Company for a period of one year and until terminated by the notice provided; whereupon it was moved by Mr. Lincoln that the execution and delivery of the proposed contract by the President and Secretary of this Company be authorized, which motion being duly seconded by Mr. Sprague was unanimously adopted.

CITY'S EXHIBIT No. 147.

ILLINOIS BELL TELEPHONE COMPANY

Date

I hereby certify that the following is a true copy of resolution duly adopted by the Board of Directors of the Illinois Bell Telephone Company at a regular meeting duly called and held on November 26, 1924, at which meeting a quorum was present.

.....

Secretary

The President stated that the American Telephone and Telegraph Company had offered to modify the existing agreement regarding the commissions paid this Company on toll messages, and that the officers of the Company had, upon investigation, determined that such modification would be advantageous to the Company. The special arrangements regarding the Chicago exchange will not be affected by the modification.

After discussion, the following resolution was moved, seconded, and unanimously adopted:

RESOLVED: That the modification of the originating commissions payable under the existing agreements between this Company and the American Telephone and Telegraph Company, as set forth in the letter of Edgar S. Bloom, Vice President of said Company, dated October 21, 1924, except as affecting the Chicago exchange, be accepted by this Company, the same to become effective January 1, 1925.

City Exhibit 148.

Supplemental answer to question, Pages 2047 and 2050, Transcript of Record.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

COST OF CAPITAL FUNDS PROCURED BY THE AMERICAN COMPANY THROUGH ALE OF STOCK, BONDS AND OTHER BORROWINGS

	Ratio of Capital Funds Procured		Annual Cost		
	Stock	Bonds and Other Borrowings	Stock	Bonds and Other Borrowings	Total
1918	0%	100.00%	0%	8.33%	8.33%
1919	0	100.00	0	7.17	7.17
1920	0	100.00	0	8.00	8.00
1921	97.38	2.62	8.89	5.88	8.81
1922	96.36	3.64	8.77	5.63	8.66
1923	26.56	73.44	8.59	6.07	6.74
1924	89.94	10.06	8.42	5.70	8.16
1925	18.31	81.69	7.70	5.84	6.18
1926	100.00	0	8.42	0	8.42
1927	100.00	0	7.33	0	7.33
1928	96.41	3.59	8.21	5.51	8.11

C. H. HEISS

June 12, 1929.

6-18-29

CITY EXHIBIT 149.

CHICAGO TELEPHONE COMPANY

(Name of company)

AUTHORITY SHEET, ESTIMATE No. eg 20020.

Department No. IE-156 Date Feb. 16, 1920.

Authority is hereby requested for doing the work described below:

(Omit cents)

SUMMARY OF EXPENDITURE

Fixed capital, new plant:		
Additions and replacements	1,280,884.	
Removing plant	9,880.	
Total	1,290,764.	
Gross expenditure	1,290,764.	

Are expenditures to be charged to plant accounts monthly? No.

To be started	To be finished
3-1-1920	8-1-1921

Work to be done by W. E. Co.

CLASSIFICATION

Fixed capital:		
Additions and replacements	1,280,884.	
Less plant displaced	189,534.	
Net plant charge		1,091,350
Reserve for accrued depreciation:		
Plant displaced	189,534.	
Less salvage	67,854.	
	121,680.	
Plus removing plant	9,880.	
Net (a)		131,560
Supplies and junk (Salvage on plant displ'd and ext. rep.)		67,854
Gross charge to fixed capital and reserve		1,290,764
Total		1,290,764

Summary of work: office Various Exchange Chicago State Ill.
Installation of Call Indicator and Key Indicator Equipment in various offices, to operate in conjunction with 5 Machine Switching Units to be installed during 1922. Per Traffic Order C-2022, dated February 5, 1920. Work to be done in accordance with Specifications M. S.—2 to M. S.—33 inclusive.

This project is included in the 1920 provisional estimate as project #205.

450,000. included in budget for current year. Proj. 205.

Submitted

2-9—1920 T. J. CALLAHAN,

Approved

Feb 19 1920 A. R. BONE,
Gen'l Commercial Supt.

Feb 20 1920 F. REDMOND,
Official Plant Superintendent.

Feb 20 1920 S. J. LARNED,
General Traffic Superintendent

Feb. 19 1920 J. S. FORD,
Engineer.

450,000. to be expended in current year. Proj. 205.

Approved 840,764. To be expended during 1921.

Feb. 20 1920 W. R. ABBOTT,
General Manager.

Feb. 20, 1920 S. A. RHODES,
Chief Engineer.

2/21/ 1920 H. F. HILL,
Vice President.

2/21 1920 B. E. SUNNY,
President.

Authorized by the Board of Directors.

List No. 2 Date 4/1/20

March 20, 1925.

Analysis Report—Estimate No. Cg-20020—(Relay Call Indicator Equipment)—Various Chicago Offices—Machine Switching Division—City.

The work under this estimate was performed under normal conditions with the exceptions noted below:

CENTRAL OFFICE EQUIPMENT INSTALLATION:

The under-run on Central Office Equipment is due to the fact that at the time the estimate was prepared, the cost of both key indicator and call indicator equipment was included. Subsequently, the key indicator equipment was canceled, leaving only the call indicator equipment to be installed under this estimate.

In July, 1920, the American Telephone and Telegraph Company forwarded cost information for call indicator equipment dated June 1, 1920, which indicated an increase of about 38 per cent over the original figures upon which the estimate was based. Again, in September, 1921, they forwarded new information dated August 31, 1921, which was prepared primarily for study purposes and indicated a further increase in call indicator costs of about 54 per cent. Late in 1921, the Western Electric Company began submitting contract proposals covering the cost of call indicator equipment for Chicago and suburbs, which were considerably in excess of our estimates based on the latest figures received from the American Telephone and Telegraph Company. At our request, Mr. Renshaw came to Chicago in October of that year, and as a result of his investigation, new cost units were prepared which included certain equipment that had been omitted from previous figures. Estimates prepared from these new units resulted in a further increase of about 54 per cent, or a total increase over the original estimates of about 227 per cent. These new estimates checked very closely with the contracts submitted by the Western Electric Company, and were used as a basis for their acceptance. During this same period, a similar increase in the cost of key indicator equipment also occurred, so that had the original plan of installing both types of equipment been followed, authority for additional expenditure would have been necessary, as there would have been a considerable over-run on the estimate.

INTEREST DURING CONSTRUCTION:

Since Estimate No. Cg-20020 was prepared, a change in the method of distributing the accounts of certain overhead expenditures and the addition of Interest during construction has occurred, (General Bulletin No. 106) necessitating an item of Interest during Construction which was not included in the estimate.

COST OF REMOVING:

The original plan was to remove all of the call circuit position and trunk equipment associated with the positions which were converted to call indicator. It was later decided to allow such call circuit trunk equipments as could be used for additions to the office to remain in place. This reduced the cost of removing and caused the under-run.

CHANGES:

In connection with the work covered by this estimate, it was found necessary to make some minor changes in our tone circuits which had not been contemplated when the estimate was prepared. This caused the over-run shown.

REPAIRS:

Due to the fact that a change in plan occurred, which caused certain call circuit equipments to remain in plant, which under the original plan were to be removed, it became necessary, in some cases, to place tube protection on the wiring forms from which equipment had been removed, resulting in the expenditure shown.

PLANT DISPLACED AND SALVAGE:

As explained under "Cost of Removing," it was originally planned to remove from plant all call circuit trunk and position equipments which were replaced by the new call indicator equipment. The change in plan, which left in place the greater part of the call circuit trunk equipments, resulted in the under-run shown.

The larger under-run on Salvage is due to the fact that the major part of the plant actually displaced, consisted of position equipment which has a lower salvage value than trunk equipment.

SUPERVISION OF MAINTENANCE:

This over-run was due to the work covered in the previous item "Changes", for which nothing had been allowed in the estimate.

W. F. PATTEN.

DEM*RJF**GS

RECOMMENDATION SHEET

Department No. Date 2-5-20

Exchange: Chicago Office Various City Chicago State Ill
Toll Line: Traffic Recommendation C-2022

It is recomended that "B" positions and associated trunks as indicated on the attached sheets be rewired and arranged for call indicator operation.

These changes are necessary to meet the trunking from machine switching units which will be in service December 31, 1923.

"B" Positions to be rewired..... 151
Trunks to be rewired.....5672

Feb 9 1920

Feb 6 1920

Recommended — H. T. SMITH, Traffic Engineer.

Concurred in — S. J. LARNED, General Traffic Supt.

Concurred in A.P.A.S. — A. R. BONE, General Commercial Supt.

Recommended

2-9-20 W. G. LUSCOMBY, Commercial Superintendent.

2-6-20 F. A. DE PEYSTER, Traffic Superintendent.

Feb 14 1920 J. S. FORD, Engineer.

Approved:

Feb 16 1920 A. E. VAN HAGAN, Traffic Engineer.

" 17 1920 W. F. PATTEN, Plant Engineer.

" 19 1920 S. A. RHODES, Chief Engineer.

RECOMMENDATION SHEET

Department No. Date 2-5-20.

Exchange: Chicago Office Various City Chicago State Ill
Traffic Recommendation C-2022

It is recommended that key indicator equipment be installed in certain "A" boards as indicated in the attached sheets. Cost studies have been made which show a consider-

able saving in using the key indicator method of handling traffic from manual to machine switching units.

"A" positions to be equipped....2044
Link circuits to be provided..... 749
Senders to be provided..... 277

Feb 6 1920 — Recommended
A. P. Smith, Traffic Engineer.

Feb 6 1920 — Concurred in
S. J. Larned, General Traffic Supt.

Feb 9 1920 — Concurred in A.P.A.
A. R. Bone, General Commercial Supt.

2-9-20 W. G. Luscomby, Commercial Superintendent.

2-6-20 E. A. de Peyster, Traffic Superintendent.

Feb 14 1920 J. S. Ford, Engineer.

Approved:

Feb 16 1920 A. E. Van Hagan, Traffic Engineer.

" 19 1920 W. F. Patten, Plant Engineer.

" 19 1920 S. W. Rhodes.

Detail Sheet C, New Construction and Replacements.

Department No. I.E.—156 Date 2/16/20

Type of Plant, Code No. 7-C

Units of Material or Work	(*d*)
Key Indicator Equipment	
Belmont Office	
63 Pos. 5 Allotters, 7 Senders	15,741.00
Calumet Office	
78 Pos. 5 Allotters, 12 Senders	18,948.00
Dearborn Office	
48 Pos. 5 Allotters, 8 Senders	13,367.00
Douglas Office	
39 Pos. 5 Allotters, 9 Senders	12,232.00
Edgewater Office	
96 Pos. 6 Allotters, 11 Senders	26,074.00

Humboldt Office	
63 Pos. 5 Allotters, 9 Senders	16,997.00
Hyde Park Office	
120 Pos. 10 Allotters, 13 Senders	28,646.00
Irving Office	
48 Pos. 5 Allotters, 6 Senders	12,536.00
Kedzie Office	
81 Pos. 5 Allotters, 9 Senders	18,934.00
Lake View Office	
111 Pos. 10 Allotters, 10 Senders	24,606.00
Lawndale Office	
79 Pos. 5 Allotters, 10 Senders	21,461.00
Lincoln Office	
57 Pos. 5 Allotters, 8 Senders	14,643.00
Main Office	
87 Pos. 5 Allotters, 13 Senders	21,397.00
Franklin Office	
78 Pos. 5 Allotters, 13 Senders	21,267.00
Monroe Office	
102 Pos. 10 Allotters, 13 Senders	25,341.00
McKinley Office	
27 Pos. 5 Allotters, 7 Senders	9,887.00
Oakland Office	
122 Pos. 10 Allotters, 15 Senders	31,562.00
Prospect Office	
48 Pos. 5 Allotters, 8 Senders	13,697.00
Randolph Office	
90 Pos. 5 Allotters, 15 Senders	25,014.00
Rogers Park Office	
48 Pos. 5 Allotters, 6 Senders	12,689.00
Stewart Office	
45 Pos. 5 Allotters, 8 Senders	14,389.00
Wabash Office	
138 Pos. 10 Allotters, 18 Senders	35,331.00

Harrison Office	
141 Pos. 1[illegible] Allotters, 18 Senders	35,896.00
Wentworth Office	
90 Pos. 5 Allotters, 11 Senders	21,866.00
West Office	
57 Pos. 5 Allotters, 9 Senders	15,948.00
Yards Office	
84 Pos. 5 Allotters, 10 Senders	19,579.00

CALL INDICATOR EQUIPMENT

Austin Office	
3 Pos. 144 Trunks	7,653.00
Belmont Office	
3 Pos. 144 Trunks	7,653.00
Beverly Office	
1 Pos. 30 Trunks	1,696.00
Calumet Office	
5 Pos. 222 Trunks	11,900.00
Canal Office	
2 Pos. 60 Trunks	3,542.00
Dearborn Office	
2 Pos. 96 Trunks	5,072.00
Douglas Office	
3 Pos. 120 Trunks	6,513.00
Edgewrater Office	
8 Pos. 264 Trunks	15,488.00
Humboldt Office	
5 Pos. 171 Trunks	9,875.00
Hyde Park Office	
8 Positions, 333 Trunks	18,378.00
Irving Office	
3 Positions, 144 Trunks	7,878.00
Kedzie Office	
6 Positions, 196 Trunks	11,506.00
Kildare Office	
2 Positions, 96 Trunks	5,102.00

Lake View Office 8 Positions, 252 Trunks	15,128.00
Lawndale Office 5 Positions, 240 Trunks	12,715.00
Lincoln Office 4 Positions, 118 Trunks	7,124.00
Main Office 10 Positions, 360 Trunks	20,110.00
McKinley Office 2 Positions, 68 Trunks	3,622.00
Monroe Office 5 Positions, 206 Trunks	11,215.00
Oakland Office 9 Positions, 348 Trunks	19,239.00
Prospect Office 4 Positions, 146 Trunks	8,364.00
Pullman Office 1 Position, 48 Trunks	2,551.00
Randolph Office 5 Positions, 175 Trunks	9,855.00
Rogers Park Office 2 Positions, 96 Trunks	5,102.00
So. Chicago Office 2 Positions, 96 Trunks	5,102.00
Stewart Office 5 Positions, 184 Trunks	10,515.00
Superior Office 3 Positions, 80 Trunks	5,093.00
Tandem Office 4 Positions, 120 Trunks	6,784.00
Wabash Office 15 Positions, 525 Trunks	29,565.00
Wentworth Office 8 Positions, 276 Trunks	15,728.00

West Office	
4 Positions, 148 Trunks	8,324.00
Yards Office	
5 Positions, 216 Trunks	11,614.00
Western Electric Engineering	25,742.00

Detail of indirect expense

	%	Amount
Engineering		12,871.00
Total indirect expense..		12,871.00

Total Material	883,796.00
Total labor and other costs..	378,217.00
Freight & cartage.....	5,000.00
Incidentals	1,000.00
Total direct expense 1,268,013.00	
Indirect expense (per detail)	12,871.00
Total cost $1,280,884.00	

Code No.
7-C

DETAIL SHEET X, PLANT DISPLACED.

Department No. I. E.—156 Date 2/16/20

Type of Plant, Code No. 7-X

Units of Material or Work	Original Cost	Salvage on Material
Austin Office		
2 Positions, 96 Trunks	2,324.00	1,056.00
Belmont Office		
3 Positions, 144 Trunks	3,486.00	1,584.00
Beverly Office		
1 Position, 33 Trunks	883.00	499.00
Calumet Office		
5 Positions, 218 Trunks	3,898.00	2,398.00
Canal Office		
2 Positions, 48 Trunks	1,232.00	528.00
Dearborn Office		
2 Positions, 96 Trunks	1,385.00	1,056.00

Douglas Office		
3 Positions, 126 Trunks	3,212.00	1,386.00
Edgewater Office		
8 Positions, 284 Trunks	7,204.00	3,212.00
Humboldt Office		
5 Positions, 158 Trunks	3,336.00	1,738.00
Hyde Park Office		
9 Positions, 329 Trunks	8,251.00	3,819.00
Irving Office		
3 Positions, 144 Trunks	3,486.00	1,584.00
Kedzie Office		
6 Positions, 212 Trunks	5,573.00	2,442.00
Kildare Office		
2 Positions, 96 Trunks	2,324.00	1,056.00
Lake View Office		
8 Positions, 252 Trunks	6,788.00	2,572.00
Lawndale Office		
5 Positions, 239 Trunks	5,791.00	2,629.00
Lincoln Office		
4 Positions, 133 Trunks	3,572.00	1,463.00
Main Office		
10 Positions, 470 Trunks	11,656.00	5,170.00
McKinley Office		
2 Positions, 68 Trunks	1,792.00	748.00
Monroe Office		
5 Positions, 230 Trunks	5,688.00	2,530.00
Oakland Office		
9 Positions, 385 Trunks	9,701.00	4,741.00
Prospect Office		
4 Positions, 146 Trunks	3,774.00	1,606.00
Pullman Office		
1 Position, 48 Trunks	1,162.00	528.00
Randolph Office		
5 Positions, 200 Trunks	4,900.00	2,200.00
Rogers Park Office		
2 Positions, 96 Trunks	2,324.00	1,056.00
So. Chicago Office		
2 Positions, 96 Trunks	2,324.00	1,056.00

Stewart Office		
5 Positions, 240 Trunks	5,810.00	2,640.00
Superior Office		
3 Positions, 78 Trunks	2,232.00	858.00
Tandem Office		
4 Positions, 120 Trunks	3,010.00	1,320.00
Wabash Office		
15 Positions, 560 Trunks	14,180.00	6,160.00
Wentworth Office		
8 Positions, 342 Trunks	8,634.00	3,762.00
West Office		
4 Positions, 136 Trunks	4,244.00	1,826.00
Yards Office		
5 Positions, 240 Trunks	5,878.00	2,640.00
Western Electric Engineering	3,000.00	
	Total Salvage	67,854.00

Detail of Indirect Expense
(For plant displaced)

Engineering	1,500.00
Total indirect expense...	1,500.00

Total material	153,054.00
Total labor and other costs..	34,980.00
Total direct expense	188,034.00
Indirect expense (per detail).	1,500.00
Total cost of plant displaced.	189,534.00

Cost of Removing Plant Displaced

Labor and other costs.....	9,880.00
Total direct expense.....	9,880.00
Total cost of removing.....	9,880.00

Code No. 7-X

City Exhibit 150.

WNH:CO'M:HO

I. E. 156

ILLINOIS BELL TELEPHONE COMPANY

FINAL COMPLETION REPORT, ESTIMATE NO. 20020

Title: Central Office Telephone Equipment, Various Offices
Date: February 3rd 1925 Chicago Div. Illinois, State

Actual:	Gross	$1126251.85			Salvage & Wiring	$11347.62	Net	$1114904.23
Authorized:	Gross	$1290764.00			Gain "	$67854.00	Net	$1222910.00
*Difference		$ 164512.15			"	$56506.38		$ 108005.77
*Variation		12.7%				83.3%		8.8%
Fixed Capital Accounts								
	Gross		Plant				Net	
Actual:	Additions	$1118747.57	Displaced	$ 55870.22			Additions	$1062877.35
Authorized	"	$1280884.00	"	$189534.00			"	$1091350.00
*Difference		$ 162136.43		$133663.78				$ 28472.65
*Variation		12.6%		70.5%				2.6%
Reserves (Actual)								
Removing		$ 7504.28	Plant Displaced	$ 55870.22	Salvage	$11347.62	Net	$ 52026.88
					Actual Net to Reserves			$ 52026.88
					Authorized: " " "			$ 131560.00
					*Difference			$ 79533.12
					*Variation			60.4%
Maintenance								
Actual,	Gross	$ 2789.48			Salvage	$ 13.42	Net	$ 2776.06

Work Commenced August 2nd 1921 and Completed July 14th 1923

This estimate provided expenditure for Call Indicator Equipment in all Chicago Manual Offices necessary for operation with the State-Central machine switching units.

All bills and vouchers have been paid and properly reported. All material both new and recovered has been reported to the proper accounts.

An analysis of performance is given on the attached statement.

Approved	Date	Approved	Date
P. M. League		H. A. Curtis	4/16/25
For Plant Accountant		General Plant Superintendent	
W. F. Patten	4-4-25	P. Stephan, Jr.	5-2-25
		for Vice-President and General Manager	
Equipment Engineer		W. V. Kurtz	4-30-25
		Chief Engineer	

for Vice-President and General Manager
Executive Committee
Board of Directors by:

U. F. Cleveland, General Auditor — L. V. Jay, Assistant Secretary

May 27 1925

WNH:CO'M:HO

ILLINOIS BELL TELEPHONE COMPANY

Sheet No. 1 (Name of company)

Summary for Completion Report, Estimate No. 200 20

	Expenditures		
	Actual	Estimated	Diff. %
Chargeable to Central Office			
Telephone Equipment Installation			
Material	879581.47	883796	
Supply Expense	1108.36		
Labor	34859.55	378217	
Overhead Expense ..	56389.38	12871	
Other Expenditures .	21632.20	6000	
Total	993570.96	1280884	22.4
Chargeable to Interest during Construction (Acct. 268)			
Interest	125176.61		
Total	125176.61		

Chargeable to Central Office Telephone Equipment (Cost of Removing)			
Labor	1777.78	9880	
Overhead Expense	767.93		
Other Expenditures	4958.57		
Total	7504.28	9880	24.0
Chargeable to Central Office Telephone Equipment (Changes)			
Labor	2378.02		
Other Expenditures	4.40		
Total	2382.42		
Chargeable to Central Office Telephone Equipment (Repairs)			
Material	99.66		
Supply Expense	5.24		
Total	104.90		

Plant Displaced			%		Salvage			%
Actual	Estimated	Diff.		Account	Actual	Estimated	Diff.	
55870.22	189534		70.5	Cent. Ofc. Tel. Equip.	11347.62	678.54		83.3
				" " " " (Chgs)	11.77			
				" " " " (Repairs)	1.65			

WNH:CO'M:HO

ILLINOIS BELL TELEPHONE COMPANY

Sheet No. 2 (Name of company)

SUMMARY FOR COMPLETION REPORT, ESTIMATE NO. 20020.

Item	Plant Units Actual	Plant Units Estimated	Expenditures Actual	Expenditures Estimated	% Diff.
Chargeable to 501 M Supervision of Maintenance					
Overhead Expense			302.16		
Total			302.16		

City Exhibit 151.

ILLINOIS BELL TELEPHONE COMPANY

Date	Total No. of Employees	No. of Employees Eligible to Subscribe #	No. of Shares of A. T. & T. Stock issued to Employees during year	No. of Shares of A. T. & T. Stock under Subscription end of Year	% of Total Employees Subscribing
Dec. 31, 1915....	12,794	.....	.....	9,761	24.91
1916....	14,578	.....	.....	14,928	40.09ϕ
1917....	14,724	.....	2,365	11,361	30.90ϕ
1918....	14,219	.....	8,979	3,526	12.57
1919....	15,931	.....	1,030	2,540	7.95
1920....	19,550*	.....	2,540 (approximate)	19,272	24.24
1921....	19,737	16,817	5,902	40,505	55.20ϕ
1922....	21,896	18,401	21,069	36,509	45.02
1923....	23,831	19,221	15,687	38,037	45.86
1924....	25,006	20,944	7,692	56,596	63.62
1925....	26,940	22,040	6,607	56,294	59.00

* Includes 2,551 employees taken over from Central Union Telephone Company.

No data available on number of employees eligible for first two plans.

Length of service necessary for eligibility:
First plan January 1, 1915 and extension March 1, 1916—2 years.
Second plan December 1, 1919—1 year.
Third plan May 1, 1921—6 months.

ϕ Includes duplications due to employees subscribing under more than one "plan".

6-18-29

CITY'S EXHIBIT 152-A.

TO HELP YOU WITH YOUR CALLS TO LONG DISTANCE POINTS

(For rates, see opposite page)

STATION-TO-STATION SERVICE

is the connection of one telephone station with another telephone station at a distant toll point. The calling party agrees to talk, and pay for the message, if *anyone* answers the called station; and the Company does not undertake to secure for him any particular person or Private Branch Exchange station.

To obtain the low rates and quick results of this form of service, just call for the distant telephone station by number, or if the number is not known to you tell the operator the name and address.

The time at the originating end when connection is established governs the charge and applies to the entire message.

There is no Report Charge if the call is not completed.

Charges cannot be "reversed" or collected at the distant end except on the basis of "Person-to-Person" service and rates.

When you place a call, tell the long distance operator that you wish "Station-to-Station Service" and will talk with "anyone who answers."

Station-to-Station Day Rates—4:30 A. M. to 8:30 P. M.

Station-to-Station Evening Rates—8:30 P. M. to Midnight.

Approximately *one-half* of the day rates, but with no rate reduced below 25 cents. Time at originating end controls.

Station-to-Station Night Rates—Midnight to 4:30 A. M.

Approximately *one-fourth* of the day rates, but with no rate reduced below 25 cents. Time at originating end controls.

Rate applying at time a connection is established applies to the entire message.

See opposite page for "Rates to Typical Long Distance Points" and comparison of Station-to-Station (day, evening and night) and Person-to-Person charges.

GENERAL INFORMATION

Overtime Charges—for each additional minute or fraction thereof, are approximately one-third of the initial period rate for any class of call.

Evening and Night Rates apply only to Station-to-Station calls and never to Person-to-Person, Appointment, Messenger or Reversed Charge calls.

Request for Charges. If you desire to be told the charge on any message, it will save time if you so advise the operator when you place the call. In the case of reversed charge calls it is important that you make the request when you agree to accept the charges. Otherwise considerable delay will result while she obtains the rate and computes the charge.

Bills for Long Distance Service cover from the 16th of one month to the 15th of the next month, inclusive (rather than a calendar month), in order that they may be issued promptly on the first of each month.

Supervision by Private Branch Exchange Operators. The Telephone Company's long distance operator is responsible for the supervision and timing of all messages and for the character of the service furnished. Attempted supervision of connection by Private Branch Exchange Operators interferes with satisfactory service and such operators should not remain "cut in" on the line after the connection has been established.

Report all Complaints of Long Distance Service to the "Long Distance Chief Operator."

For Information not given above, call "Long Distance Information Operator."

PERSON-TO-PERSON SERVICE

All hours, day or night

This service differs from the Station-to-Station service in that a particular person, or particular extension of a Private Branch Exchange, is called for instead of "anyone who answers the telephone" at the distant end. The rates for this service are not reduced during the evening or night hours. Charges for this service may be "reversed" or collected at the distant station if accepted by such station.

Owing to the fact that the Company may be unable, for reasons beyond its control, to complete calls for particular persons or P. B. X. stations, this class of call is accepted only

with the understanding that a *Report Charge* will apply, under the conditions outlined below, if a chargeable conversation does not result.

Person-to-Person Call Rates are about *one-fourth greater* than the corresponding *Station-to-Station Day Rates.*

Appointment Call Rates are about *one-fifth greater* than the corresponding *Person-to-Person* call rates. An appointment call is one on which connection is to be established at a specified time set by either party. *Report Charges apply.*

Messenger Call Rates are the same as those for *Appointment* calls plus a charge for messenger service required to notify the desired person to come to the telephone. In case the desired person cannot be secured, a *Report Charge plus the Messenger Charges* must be paid.

Reversed Charges—Messages or calls on which charges are to be "reversed," or collected at the distant end, are accepted only at *Person-to-Person, Appointment* or *Messenger* call rates, and *not at Station-to-Station* rates.

If you desire the charges reversed you must so advise the operator *when you place the call.* If the called party refuses to accept the charges a *Report Charge* will be made unless the call is then completed, as a Person-to-Person paid message.

Report Charge. A charge of approximately *one-fifth of the Person-to-Person* rate to the point involved is made if communication is not established on Person-to-Person, Appointment, Messenger or Reversed Charge calls under the following conditions:

1. When within one hour a report is made to the calling party that the distant party is "out" or "will return at a certain time," or similar reports due solely to the circumstances of the called person.
2. When the connection is ready within one hour but the calling party is absent from the calling station.
3. When the particular person called refuses to talk or refuses to accept reversal of charges.
4. When the calling party refuses to talk at the time facilities for communication have been established.
5. When a particular person called for in a given city, telephone address unknown, cannot be secured within one hour.
6. When an Appointment call cannot be completed after the appointment has been definitely arranged for.

7. When a Messenger call cannot be completed after arrangements have been made to notify the desired party to come to the telephone.

No Report Charge is made if the call is completed later in the day or on the following day, nor in case the report returned is "busy," "out of order," or "don't answer," as applied to the called station.

CITY'S EXHIBIT 152-D.

IN FIVE MINUTES—OR LESS.

Cut showing bell in circle with the following wording: Illinois Bell Telephone Company American Telephone & Telegraph Co.

Year by year the telephone equipment wears out and has to be replaced at prices much higher than the original cost of the old plant. This adds constantly to the average investment per telephone, on which a return must be earned. The company's revenues must keep up with this rise.

Cut showing bell in circle with the following wording: Illinois Bell Telephone Company American Telephone & Telegraph Co.

Nearly all long distance telephone calls from Chicago to New York during the business day are now being completed (or a definite report given) in five minutes or less—usually less.

Telephone service to New York has always been rapid and reliable. New methods have now reduced the time required by the operators to handle calls on these lines to an almost incredible minimum.

Just think of it! *Chicago to New York in five minutes.* Important business messages or personal calls from home telephones are handled with equal promptness.

ILLINOIS BELL TELEPHONE COMPANY

BELL SYSTEM

One Policy One System Universal Service

CITY'S EXHIBIT 152-E.

THE COMMONWEALTH

In the American constitution its makers attained a two-fold achievement: they provided a central form of government equipped to perform national functions adequately, and they left to local governing bodies the responsibility of local affairs. The people's need, as manifest even in the nation's babyhood, determined this governmental structure.

The Bell System is a similar division of responsibility, visioned from a forecast of the nation's communication needs when the telephone was young in service. The Associated Companies are specialists in local service problems, with local operating forces identified and familiar with the needs of the communities they serve. The parent company undertakes the solution of the problems that are common to all.

America today has a telephone service that is nationwide and unified. A backward look to the beginnings of the telephone shows that this could not have come about without an organization paralleling that of the American Union, capable of expanding with the growth of the nation.

Illinois Bell Telephone Company

Bell System

American Telephone & Telegraph Co.

ILLINOIS BELL TELEPHONE COMPANY

BELL SYSTEM

One Policy One System Universal Service

CITY'S EXHIBIT No. 152-F.

CONQUERING LIMITATIONS

John Mercereau's stage coach lumbered its creaking way from New York to Philadelphia in a day and a half, in 1771, and was considered so fast that it was called "The Flying Machine." When steam came into use, there were the "Comet," the "Thunderbolt" and similar names, suggesting the attainment of the age-old need—speedy messengers.

Man's effort to overcome the limitations of time and distance finally put electricity to work, and it became his swiftest message bearer.

Half a century ago Bell invented the telephone. It is more than a messenger, for it has been developed to carry man's spoken words for great distances with the swiftness of light. Through its wizardry space is conquered with the speed of thought itself.

Illinois Bell Telephone Company

Bell System

American Telephone & Telegraph Co.

ILLINOIS BELL TELEPHONE COMPANY

BELL SYSTEM

One Policy One System Universal Service

CITY'S EXHIBIT NO. 152-G.

(Page 352—June, 1925—Suburban Directory of Illinois Bell Telephone Company.)

"STATION-TO-STATION" CALLS

A "Station-to-Station" call is a long distance connection between any two telephones (including private branch exchange switchboard operator) as distinguished from a call between individuals.

Under "station-to-station" rates a charge is made where a connection is established with anyone at the called telephone, but the charge is about 20 per cent lower than for a "person-to-person" call.

To make a "station-to-station" call, ask for "Long Distance," give the operator the number of the distant telephone (or the name of the subscriber if you do not know the number) and tell the operator you will talk to anyone who answers.

Illinois Bell Telephone Company
Bell System
One Policy One System Universal Service

Cut showing bell in circle with the following wording:

ILLINOIS BELL TELEPHONE COMPANY
BELL SYSTEM
American Telephone & Telegraph Co.

CITY'S EXHIBIT 152-H.

(Page 353—June, 1925—Suburban Directory of Illinois Bell Telephone Company.)

AMERICAN TELEPHONE
AND
TELEGRAPH COMPANY
STOCK
Has paid dividends uninterruptedly
for more than forty years.

CITY'S EXHIBIT No. 152-I

(Page 459—June, 1925—Suburban Directory of Illinois Bell Telephone Company.)

OUR PANAMA CANAL

AND

THE BELL TELEPHONE

Americans point with pride to the Panama Canal as one of the great engineering achievements of all time—and they are quite entitled to do so.

The Panama Canal cost $375,000,000. This is a vast sum, but it is not as great as the amount which will be spent this year alone by the Bell Telephone System for new plant and equipment.

The total investment in the Bell Telephone System is now more than three billions of dollars. It took forty-one years after the telephone was invented to build up the first billion dollars in Bell System plant investment. The second billion was added only six years later and it required only four years more to add the third billion. At the present rate of increase the fourth billion will be added in less than three years. These figures indicate the tremendous forward strides being made in telephony. They show as nothing else could the way in which the Bell System is meeting its obligation to the American people to give them the best and most complete telephone service possible.

ILLINOIS BELL TELEPHONE COMPANY

BELL SYSTEM

One Policy One System Universal Service

Cut showing bell in circle with the following wording:

Illinois Bell Telephone Company

Bell System

American Telephone & Telegraph Company

CITY'S EXHIBIT 153.

THIS AGREEMENT, Made this 1st day of December, A. D. 1910, by and between WESTERN ELECTRIC COMPANY, a corporation organized and existing under the laws of the State of Illinois, party of the first part, hereinafter called the Electric Company, and CHICAGO TELEPHONE COMPANY, a corporation organized and existing under the laws of the State of Illinois, party of the second part, hereinafter called the Telephone Company.

WITNESSETH, That the said parties, for value received and in consideration of the agreements herein contained, do hereby, for themselves, their successors, and assigns, covenant and agree as follows:

SCOPE.

1. The Telephone Company hereby employs the Electric Company as its agents to procure for it all the articles which it may require for its own use, except those which are named or described in Appendix A hereto (which may hereafter be altered from time to time by mutual consent), and hereby agrees to procure all such articles through the Electric Company; and all the provisions of this contract are to be interpreted as applying to such agency relationship.

SERVICES.

2. The Electric Company agrees to procure by manufacture, purchase, or otherwise, and to deliver at its store rooms to such persons, in such quantities, in such a manner and at such times, as the Telephone Company may reasonably designate, any apparatus, supplies or material which the Telephone Company may reasonably require, and agrees that the store rooms established at such places as may be mutually agreed upon shall not be discontinued or moved to another city except by the consent of the Telephone Company, or on one year's notice in writing by the Electric Company.

The Electric Company shall not be required to deliver any apparatus, supplies or material, or to buy any unusual quantities of supplies or material, or to manufacture any special apparatus, except on the Telephone Company's written requisition, and the Telephone Company agrees to take within one year, all the apparatus, supplies or material so bought or manufactured; or failing so to do, to thereupon reimburse the Electric Company for all actual loss sustained by it on account of such failure.

REMUNERATION.

3. The Telephone Company agrees to remunerate the Electric Company as follows:

(*a*) For furnishing telephonic appliances manufactured under exclusive license from The American Bell Telephone Company, and delivered at its warerooms, standard prices, uniform to all licensees of The American Bell Telephone Company.

(*b*) For furnishing underground, aerial and submarine cable manufactured by the Electric Company:

If shipped direct from factory, factory cost of such cable plus eight per centum (8%) at factory; or

If shipped from local storeroom, full reels, factory cost plus ten per centum (10%) plus transportation charges to storerooms; less than full reels, factory cost plus fifteen per centum (15%) plus transportation charges to storerooms. Actual loss on short lengths of cable, caused by the Telephone Company's orders for less than full reels, shall be borne by Telephone Company.

Factory cost shall include only the cost of productive labor, the cost to Electric Company of materials on date order is received by Electric Company, and the proper share of such expenses as are necessarily incurred for the purpose of manufacturing cable.

(*c*) For furnishing other manufactures of the Electric Company: Prices as low or lower than the Electric Company's prices to other most favored customers in the United States.

(*d*) For furnishing articles not made by the Electric Company, excluding hard-drawn copper wire:

If shipped from any storeroom of the Electric Company, cost to the Electric Company plus six per centum (6%); or

If shipped from any other point direct to Telephone Company, cost to the Electric Company plus four per centum (4%).

(*e*) For furnishing hard-drawn copper wire:

If shipped from any storeroom of the Electric Company, cost to the Electric Company plus five per centum (5%); or

If shipped from any other point direct to the Telephone Company, cost to the Electric Company plus one per centum (1%).

The term "COST" as used in paragraphs *d* and *e* of this section, means the net price which the Electric Company is obligated to pay the supplier after all rebates, discounts and commissions have been deducted. When transportation charges, in whole or in part, are treated by the supplier as a part of his net price to the Electric Company, they shall be included in "cost" as herein defined. All other transportation charges, except cartage to Electric Company's storerooms on articles not made by the Electric Company, shall be charged the Telephone Company, but without the addition of the aforesaid percentages. Cartage charges to Electric Company's storerooms shall be borne by the Electric Company.

SPECIAL SERVICES.

4. The Electric Company further agrees, at the option of the Telephone Company, to undertake and perform, with due care and diligence, any or all of the following described special services (none of which is included in the undertakings of the Electric Company, as described in Section 2), for such remuneration as may be mutually agreed upon from time to time.

(*a*) Receiving, storing and reissuing or disposing of any used apparatus supplies and material returned by the Telephone Company.

(*b*) Carrying any special stock of any articles which the Telephone Company may prescribe from time to time.

(*c*) Receiving, storing and reissuing or disposing of furniture, fixtures, tools and construction outfits.

(*d*) Operating a local repair and emergency shop.

(*e*) Receiving, storing and delivering telephones and transmitters.

(*f*) Mounting telephones and transmitters.

(*g*) Inspection of articles not made by the Electric company.

(*h*) Cartage, except to Electric Company's storerooms.

(*i*) Prepayment of transportation charges on shipments to the Telephone Company, and taking up and adjusting claims with carriers.

(*j*) Any special accounting or clerical work not ordinarily required of a purchasing agent.

(*k*) Any other services not hereinbefore in this contract described.

PAYMENT.

5. The Electric Company shall render a monthly statement of account, which shall be due and payable thirty (30) days after the date of its delivery to the Telephone Company.

If the Electric Company consents to deferred payment, any portion of said account not paid when due, shall thereafter bear interest at a reasonable rate.

If payment is deferred without its consent, the Electric Company may, on reasonable notice, suspend or terminate its obligations hereunder.

DEFECTIVE MATERIAL.

6. The Electric Company shall be liable under this contract only for direct damages arising from failure to exercise reasonable care and diligence in performing its obligations hereunder; and, in addition, as to any articles manufactured by the Electric Company, or specially inspected by it under Section 4 (*g*) above, which prove to be defective, the Electric Company shall be obligated either to replace the same at its own expense or to take back and allow full credit therefor.

ARBITRATION.

7. Any question arising under this contract may be referred by either party for decision to such person or persons as the Presidents of the two Companies, parties hereto, may agree upon, and the decision of such person or persons shall be final and binding upon the parties hereto.

DELAYS.

8. Whereas the due prosecution of the business of the Telephone Company requires that its apparatus, supplies and material shall be promptly furnished and as herein provided; and whereas the time required to ascertain judicially whether the Electric Company shall or shall not have failed to perform its obligations hereunder might cause a delay which would work damage to the Telephone Company, now: it is an integral part of this contract that whenever the President of the Telephone Company shall be of the opinion that the Electric Company has failed in its obligations in this respect, or that there is imminent danger or probability that it will so fail, the Telephone Company may without notice or demand, purchase elsewhere such apparatus, supplies and material—

excluding telephone appliances manufactured by the Electric Company under exclusive license from The American Bell Telephone Company—as in its opinion may be required to meet the emergency, and it shall thereafter be determined by a referee or referees, hereinbefore provided for, whether or not the opinion so acted upon by the Telephone Company was erroneous, and what, if any, damage resulted to either the Telephone Company or the Electric Company; and it is hereby agreed that any assessment for damages which said referee or referees may make in the premises shall be accepted by the party so assessed as a just obligation.

DURATION.

9. The active operation of this contract shall begin January 1, 1911, and it shall remain in force thereafter until terminated by mutual agreement or by one year's notice in writing from either party to the other, or by the termination of the license from The American Bell Telephone Company to the Telephone Company or to the Electric Company.

IN WITNESS WHEREOF, The parties hereto have caused these presents to be signed in their behalf by their respective officers thereunto duly authorized, and their corporate seals to be hereunto affixed the day and year first above written.

WESTERN ELECTRIC COMPANY,
By H. A. HALLIGAN,
Vice-President.

ATTEST:
G. C. PRATT,
Secretary.

CHICAGO TELEPHONE COMPANY,
By B. E. SUNNY,
President.

ATTEST:
C. E. MOSLEY,
Secretary.

CHICAGO TELEPHONE COMPANY,
Recorded in
Auditor's Office
H. H. HENNY.
By H. F. W. Date 1/17/11

CITY'S EXHIBIT 154

THIS AGREEMENT, Made this 14th day of January, A. D. 1913, by and between WESTERN ELECTRIC COMPANY, a corporation organized and existing under the laws of the State of Illinois, party of the first part, hereinafter called the Electric Company, and CHICAGO TELEPHONE COMPANY, a corporation organized and existing under the laws of the State of Illinois, party of the second part, hereinafter called the Telephone Company.

WITNESSETH, That the said parties, for value received and in consideration of the agreement herein contained, do hereby, for themselves, their successors and assigns, covenant and agree as follows:

SCOPE.

1. The Telephone Company hereby employs the Electric Company as its agent to procure for it all the articles which it may require for its own use, except those which are named or described in Appendix A hereto (which may hereafter be altered from time to time by mutual consent), and hereby agrees to procure all such articles through the Electric Company; provided, however, that nothing herein contained shall be construed as requiring the Telephone Company to purchase, or use any article, or articles manufactured or sold by the Electric Company unless it shall desire to do so.

SERVICES.

2. The Electric Company agrees to procure by manufacture, purchase, or otherwise from such sources and to deliver at its store rooms to such persons, in such quantities, in such a manner and at such times, as the Telephone Company may reasonably designate, any apparatus, supplies or material which the Telephone Company may reasonably require, and agrees that the store rooms established at such places as may be mutually agreed upon shall not be discontinued or moved to another city except by the consent of the Telephone Company, or on one year's notice in writing by the Electric Company.

The Electric Company shall not be required to deliver any apparatus, supplies, or material, or to buy any unusual quantities of supplies or material, or to manufacture any special apparatus, except on the Telephone Company's written requisition, and the Telephone Company agrees to take within one

year, all the apparatus, supplies or material so bought or manufactured; or failing so to do, to thereupon reimburse the Electric Company for all actual loss sustained by it on account of such failure.

REMUNERATION.

3. The Telephone Company agrees to remunerate the Electric Company as follows:

(*a*) For furnishing telephonic appliances manufactured under exclusive license from The American Bell Telephone Company, and delivered at its warerooms, standard prices, uniform to all licensees of The American Bell Telephone Company.

(*b*) For furnishing underground, aerial and submarine cable manufactured by the Electric Company:

If shipped direct from factory, factory cost of such cable plus eight per centum (8%) at factory; or

If shipped from local storeroom, full reels, factory cost plus ten per centum (10%) plus transportation charges to storerooms; less than full reels, factory cost plus fifteen per centum (15%) plus transportation charges to storerooms. Actual loss on short lengths of cable, caused by the Telephone Company's orders for less than full reels, shall be borne by Telephone Company.

Factory cost shall include only the cost of productive labor, the cost to Electric Company of materials on date order is received by Electric Company, and the proper share of such expenses as are necessarily incurred for the purpose of manufacturing cable.

(*c*) For furnishing other manufactures of the Electric Company: Prices as low as the Electric Company's prices to its most favored customers in the United States.

(*d*) For furnishing articles not made by the Electric Company, excluding hard-drawn copper wire:

If shipped from any storeroom of the Electric Company, cost to the Electric Company plus six per centum (6%); or

If shipped from any other point direct to Telephone Company, cost to the Electric Company plus four per centum (4%).

(*e*) For furnishing hard-drawn copper wire:

If shipped from any storeroom of the Electric

Company, cost to the Electric Company plus five per centum (5%); or

If shipped from any other point direct to the Telephone Company, cost to the Electric Company plus one per centum (1%).

The term "Cost" as used in paragraphs *d* and *e* of this section, means the net price which the Electric Company is obligated to pay the supplier after all rebates, discounts and commissions have been deducted. When transportation charges, in whole or in part, are treated by the supplier as a part of his net price to the Electric Company they shall be included in "cost" as herein defined. All other transportation charges, except cartage to Electric Company's storerooms on articles not made by the Electric Company, shall be charged the Telephone Company, but without the addition of the aforesaid percentages. Cartage charges to Electric Company's storerooms shall be borne by the Electric Company.

Special Services.

4. The Electric Company further agrees, at the option of the Telephone Company, to undertake and perform, with due care and diligence, any or all of the following described special services (none of which is included in the undertakings of the Electric Company, as described in Section 2), for such remuneration as may be mutually agreed upon from time to time.

(*a*) Receiving, storing and reissuing or disposing of any used apparatus, supplies and material returned by the Telephone Company.

(*b*) Carrying any special stock of any articles which the Telephone Company may prescribe from time to time.

(*c*) Receiving, storing and reissuing or disposing of furniture, fixtures, tools and construction outfits.

(*d*) Operating a local repair and emergency shop.

(*e*) Receiving, storing and delivering telephones and transmitters.

(*f*) Mounting telephones and transmitters.

(*g*) Inspection of articles not made by the Electric Company.

(*h*) Cartage, except to Electric Company's storerooms.

(*i*) Prepayment of transportation charges on shipments to the Telephone Company, and taking up and adjusting claims with carriers.

(*j*) Any special accounting or clerical work not ordinarily required of a purchasing agent.

(*k*) Any other service not hereinbefore in this contract described.

PAYMENT.

5. The Electric Company shall render a monthly statement of account, which shall be due and payable thirty (30) days after the date of its delivery to the Telephone Company.

If the Electric Company consents to deferred payment, any portion of said account not paid when due, shall thereafter bear interest at a reasonable rate.

If payment is deferred without its consent, the Electric Company may, on reasonable notice, suspend or terminate its obligations hereunder.

DEFECTIVE MATERIAL.

6. The Electric Company shall be liable under this contract only for direct damages arising from failure to exercise reasonable care and diligence in performing its obligations hereunder; and, in addition, as to any articles manufactured by the Electric Company, or specially inspected by it under Section 4 (*g*) above, which prove to be defective, the Electric Company shall be obligated either to replace the same at its own expense or to take back and allow full credit therefor.

Articles to be replaced F.O.B. factory or destination in accordance with delivery terms of the original shipment.

ARBITRATION.

7. Any question arising under this contract shall be referred for decision at the option of either party to such person or persons as the Presidents of the two Companies, parties hereto, may agree upon, and the decision of such person or persons or of a majority thereof shall be final and binding upon the parties hereto.

DELAYS.

8. Whereas the due prosecution of the business of the Telephone Company requires that its apparatus, supplies and material shall be promptly furnished and as herein provided; and whereas the time required to ascertain judicially whether the Electric Company shall or shall not have failed to perform its obligations hereunder might cause a delay which

would work damage to the Telephone Company, it is agreed that whenever the President of the Telephone Company shall be of the opinion that the Electric Company has failed or is likely to fail in its obligations in this respect, the Telephone Company may without notice or demand, purchase elsewhere such apparatus, supplies and material as in its opinion may be required to meet the emergency, and it shall thereafter be determined by arbitration as above provided, whether or not the opinion so acted upon by the Telephone Company was erroneous, and what, if any, damage resulted to either the Telephone Company or the Electric Company; and it is hereby agreed that any assessment for damages which said arbitrator or arbitrators may make in the premises shall be accepted and paid by the party so assessed as a just obligation.

DURATION.

9. This contract shall become operative January 1st, 1913, and shall remain in force thereafter until terminated by mutual agreement or by one year's notice in writing from either party to the other, or by the termination of the license from the American Bell Telephone Company to the Telephone Company or to the Electric Company.

IN WITNESS WHEREOF, The parties hereto have caused these presents to be signed in their behalf by their respective officers thereunto duly authorized, and their corporate seals to be hereunto affixed the day and year first above written.

WESTERN ELECTRIC COMPANY,
By H. A. HALLIGAN,
President.

ATTEST:
E. C. PRATT,
Secretary.

CHICAGO TELEPHONE COMPANY,
By B. E. SUNNY,
President.

ATTEST:
N. SULLIVAN,
Secretary.

CITY'S EXHIBIT 155.

WESTERN ELECTRIC COMPANY

INCORPORATED

500 South Clinton Street

Chicago, October 13, 1920.
In reply refer to GEC-FS.

B. E. Sunny, President,
Chicago Telephone Company,
Chicago, Illinois.

Dear Mr. Sunny:

By the execution of the new form of telephone supply contract between us, dated October 8, 1920, which is effective beginning November 1, 1920, it is the understanding that the old form of contract between us, dated January 14, 1913, is cancelled by mutual consent; but if agreeable to you, it is our desire that the various supplementary letters relating to the old telephone supply contract shall remain in force and shall apply to the new telephone supply contract with the same force and effect as if specifically made a part of such contract.

If this meets with your approval, kindly note your acceptance on one copy of this letter and return to me.

Yours truly,
G. E. CULLINAN,
Central District Manager.

Accepted by
CHICAGO TELEPHONE COMPANY,
By W. ABBOTT,
Vice-President.

City Exhibit 156.

Standard Supply Contract

CLASS A FORM

Memorandum of Agreement, dated October 8th, 1920, between Western Electric Company, Incorporated, a corporation of the State of New York, hereinafter called the Electric Company, and Chicago Telephone Company, a corporation of the State of Illinois, hereinafter called the Telephone Company.

1. The Electric Company agrees to maintain warehouses at its present and future distributing points, and or at such other places as may be mutually agreed upon.

2. The Electric Company agrees to purchase and to deliver to the Telephone Company, at the Electric Company's storerooms or other sources of supply, from time to time, supplies not of its own manufacture which are sold in the open market or can be secured from other suppliers and which the Telephone Company may reasonably require for its business, such supplies to be so delivered in such quantities, in such a manner, and at such times as the Telephone Company may reasonably designate.

3. The Telephone Company agrees to pay the Electric Company the cost to the Electric Company of the merchandise delivered to the Telephone Company under Section 2 hereof, and in addition to remunerate the Electric Company for its services as purchasing agent and storekeeper and on account of the investment required to so purchase and furnish said supplies, by the payment to the Electric Company of the following percentages on the cost of the articles delivered:

	When shipped from any storeroom of the Electric Co.	When shipped from any other point direct to the Telephone Co.
Hard Drawn Copper Wire	5%	1%
Poles		4%
Stationery and Office Supplies	15%	6%
Directories		1%
Other Merchandise under Sect. 2	8%	5%

The term "cost" as used in this section shall include the following:

(1) The net price which the Electric Company is obligated to pay the supplier after all allowances, discounts and commissions have been deducted;

(2) Expenses incurred by the Electric Company because of technical services in connection with supplying apparatus or material manufactured by others;

(3) In case the Electric Company should purchase and furnish raw materials to mills manufacturing them into articles for the Telephone Company, the reasonable carrying charges for such raw materials, including transportation charges, interest, taxes and insurance;

(4) Transportation charges which in whole or in part are treated by the supplier as a part of his net price to the Electric Company.

All other transportation charges, except cartage to the Electric Company's storeroom, shall be charged to the Telephone Company, but without the addition of the aforesaid percentages.

Cartage charges to the Electric Company's storerooms shall be borne by the Electric Company.

4. The Telephone Company shall be under no obligation to purchase any article manufactured by the Electric Company. It is, however, agreed that such articles manufactured by the Electric Company as the Telephone Company may order and the Electric Company furnish from time to time, shall be furnished, without the addition of any service charge, upon the terms hereinafter stated:

(a) Underground, aerial and submarine cable, except ocean submarine cable in which gutta percha or like substances are used, manufactured by the Electric Company, and shipped from factory, at the Electric Company's factory cost of such cable plus eight per centum (8%) at factory.

Factory cost shall include only the cost to the Electric Company of productive labor and materials and that portion of the Electric Company's overhead expenses properly assignable to manufacturing the cable.

(b) Other manufactures of the Electric Company, at prices as low as the Electric Company's prices, under comparable conditions, to its most favored customers in the United States which are in effect on the date of shipment.

5. The Electric Company shall not be required to deliver any apparatus, supplies or materials, or to procure, by manufacture or purchase, any unusual quantities of apparatus, supplies or material, or any special apparatus, except on the Telephone Company's written requisition, and the Telephone Company agrees that such unusual quantities of apparatus, supplies or material, or special apparatus procured by the Electric Company, shall be carried under the terms of the supplementary agreement between the parties, referred to in section 6(b) of this contract.

6. The Electric Company further agrees, upon the request of the Telephone Company, to undertake and perform, with due care and diligence, any or all of the following described special services (none of which is included in the undertakings of the Electric Company hereinabove described), for such remuneration as may be agreed upon from time to time:

(a) Receiving, storing and reissuing or disposing of any used apparatus, supplies and material returned by the Telephone Company;

(b) Carrying any special stock of any article which the Telephone Company may prescribe from time to time.

(c) Buying and inspecting chestnut, cypress and juniper poles;

(d) Operating a local repair and emergency shop;

(e) Receiving, storing and delivering telephones and transmitters;

(f) Maintaining a local stock of lead covered cable at the Electric Company's storeroom;

(g) Inspection of articles not made by the Electric Company;

(h) Cartage, except to the Electric Company's storerooms, on all new material other than lead covered cable manufactured by the Electric Company;

(i) Prepayment of transportation charges on shipments to the Telephone Company and taking up and adjusting claims with carriers;

(j) Installing switchboards and switchboard additions.

(k) Purchasing paper used by printers for directories and printed forms;

(l) Any special accounting or clerical work not ordinarily required of a purchasing agent;

(m) Any other services mutually agreed upon not hereinbefore in this contract described.

7. The Electric Company shall render monthly statements of account for all articles furnished and services rendered, which shall be due and payable thirty days after date of such monthly statements. If payment is deferred, the account shall thereafter bear interest at a reasonable rate.

8. The Telephone Company agrees that, in case it shall decide to purchase through or from others, merchandise which it has theretofore customarily purchased through or from the Electric Company, it will give the Electric Company reasonable notice of such intention on its part, and will relieve the Electric Company of any loss on account of any reasonable amount of stocks carried or ordered by the Electric Company prior to the receipt of such notice, in anticipation of the Telephone Company's requirements.

9. The Electric Company shall be liable under this contract only for direct damages arising from failure to exercise reasonable care and diligence in performing its obligations hereunder; and, in addition, as to any articles manufactured by the Electric Company, or specially inspected by it under Section 6(g) above, which prove to be defective, the Electric Company shall be obligated either to replace the same at its own expense or to take back and allow full credit therefor.

Articles to be replaced, shall be furnished F. O. B. factory or destination in accordance with delivery terms of the original shipment.

10. It is anticipated that modification of the percentage payments to be made under paragraph 3 hereof and of the remuneration provided for in paragraph 6 hereof, may be required to maintain them upon a basis that shall at all times be fair and just to both parties hereto. To provide for this contingency, it is agreed that upon the request of the president of either party hereto made to the president of the other, such presidents shall appoint a committee of one or more persons, who shall investigate the situation and report to both of said presidents in writing, with recommendations of the changes, if any, which are required in order to maintain such remuneration on a basis fair and just to both parties hereto.

11. Any question arising under this contract shall be referred for decision at the option of either party to such person or persons as the presidents of the two companies, parties hereto, may agree upon, and the decision of such person or persons, or of a majority thereof, shall be final and binding upon the parties hereto.

12. This contract shall become operative November 1st, 1920, and shall remain in force thereafter until terminated by mutual agreement or by one year's notice in writing either party to the other, or by the termination of the license from the American Telephone and Telegraph Company to the Telephone Company or to the Electric Company.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be signed in their behalf by their respective officers thereunto duly authorized, and their corporate seals to be hereunto affixed the day and year first above written.

WESTERN ELECTRIC COMPANY, INCORPORATED
By C. G. DUBOIS,
President.

ATTEST:
GEO. C. PRATT,
Secretary.

CHICAGO TELEPHONE COMPANY
By W. ABBOTT,
Vice-President.

ATTEST:
E. G. DREW,
Secretary.

CITY EXHIBIT 158.

COMPARATIVE TABLE

SHOWING

EFFECT OF WEIGHTING BY MATERIAL QUANTITIES 1920—1923

	1	2		3	
	W. F. Sloan's Appraisal Method				
	Based on a fixed proportion of materials typical of the plant as a whole.	Unweighted		Weighting reversed from Method No. 1 by using reciprocals of material quantities	
Account	Total gross Additions June 30, 1923 Level	Total gross Additions June 30, 1923 Level	% of Appraisal Method	Total Gross Additions June 30, 1923 Level	% of Appraisal Method
241-Exchange Pole Lines	$ 537,017	$ 534,815	99.59	$ 529,926	98.68
242-Exchange Aerial Cable	742,458	710,826	92.71	706,936	95.22
245-Exchange Underground Cable	4,236,491	4,186,638	98.82	4,235,180	99.97
Total	$5,515,966	$5,432,279	98.48	$5,472,042	99.20

6-18-29

CITY EXHIBIT 159.

TABLE TO ILLUSTRATE THAT IF THE RATIO OF PRICES ON TWO GIVEN DATES IS FIXED, THE INDEX IS FIXED, REGARDLESS OF THE NUMBER OF UNITS USED.

Given Units of Quantity

No. of Units	Cost per Unit 1920	Cost per Unit 1923	Total Cost 1920	Total Cost 1923
1,000	$ .10	$ .15	$ 100.00	$ 150.00
800	.50	.75	400.00	600.00
600	.80	1.20	480.00	720.00
400	1.00	1.50	400.00	600.00
200	1.40	2.10	280.00	420.00
100	2.00	3.00	200.00	300.00
			$1,860.00	$2,790.00
			Ratio 150%	

Single Units of Quantity

No. of Units	Cost per Unit 1920	Cost per Unit 1923	Total Cost 1920	Total Cost 1923
1	$ .10	$ .15	$ .10	$ .15
1	.50	.75	.50	.75
1	.80	1.20	.80	1.20
1	1.00	1.50	1.00	1.50
1	1.40	2.10	1.40	2.10
1	2.00	3.00	2.00	3.00
			$ 5.80	$ 8.70
			Ratio 150%	

Reversed Units of Quantity

No. of Units	Cost per Unit 1920	Cost per Unit 1923	Total Cost 1920	Total Cost 1923
100	$ .10	$ .15	$ 10.00	$ 15.00
200	.50	.75	100.00	150.00
400	.80	1.20	320.00	480.00
600	1.00	1.50	600.00	900.00
800	1.40	2.10	1,120.00	1,680.00
1,000	2.00	3.00	2,000.00	3,000.00
			$4,150.00	$6,225.00
			Ratio 150%	

6-18-29

City Exhibit 161.

COMPARISON BETWEEN
NUMBER OF FEET OF CABLE PLACED IN CHICAGO (PLAINTIFF'S EXH. 50)
AND
NUMBER OF FEET OF CABLE PURCHASED (PLAINTIFF'S EXH. 68)
YEAR 1921

Gauge	No. of Pairs	Exhibit No. 50			Exhibit No. 68	Differences	
		Aerial	Underground	Total		Exhibit No. 50 over Exhibit No. 68	Exhibit No. 68 over Exhibit No. 50
19	26	1,019	192	1,211	28,500	.....	27,289
	51	5,685	399	6,084	4,600	1,484	.....
	101	9,655	3,989	13,644	4,300	9,344	.....
	152	.....	68	68	.....	68	.....
	202	349	6,454	6,803	.....	6,803	.....
	303	.....	37,710	37,710	18,591	19,119	.....
	455	.....	27,536	27,536	13,220	14,316	.....
Total 19 Gauge				93,056	69,211	51,134	27,289
22	11	.....	.....	.....	8,000	.....	8,000
	16	1,083	871	1,954	24,000	.....	22,046
	26	19,829	11,741	31,570	86,000	.....	54,430
	51	37,911	31,562	69,473	238,772	.....	169,299
	101	7,314	22,983	30,297	116,300	.....	86,003
	202	34	10,288	10,322	31,741	.....	21,419
	303	.....	6,295	6,295	5,117	1,178	.....
	404	.....	3,295	3,295	2,314	981	.....
	606	.....	68,038	68,038	57,319	10,719	.....
	909	.....	323	323	11,357	.....	11,034
Total 22 Gauge				221,567	580,920	12,878	372,231
24	26	2,826	984	3,810	22,000	.....	18,190
	51	8,030	2,711	10,741	165,000	.....	154,259
	76	.....	.....	.....	1,000	.....	1,000
	101	295	846	1,141	49,667	.....	48,526
	152	.....	.....	.....	1,000	.....	1,000
	202	.....	3,811	3,811	24,519	.....	20,708
	303	.....	750	750	3,308	.....	2,558
	404	.....	299	299	12,950	.....	12,651
	606	.....	13,768	13,768	28,196	.....	14,428
	1212	.....	60,896	60,896	67,438	.....	6,542
Total 24 Gauge				95,216	375,078	.....	279,862
Grand Total				409,839	1,025,209	64,012	679,382

6-18-29